



## **On approval of the Instruction for fire safety measures in the Armed Forces of the Republic of Kazakhstan**

### *Invalidated Unofficial translation*

Order of the Minister of Defense of the Republic of Kazakhstan No. 378 as of May 27, 2019. Registered with the Ministry of Justice of the Republic of Kazakhstan on May 29, 2019, No. 18744. Abolished by the Order of the Minister of Defense of the Republic of Kazakhstan dated February 10, 2023 No. 97

#### *Unofficial translation*

**Footnote. Abolished by the Order of the Minister of Defense of the Republic of Kazakhstan dated February 10, 2023 No. 97 (effective after ten calendar days after the date of its first official publication).**

**Footnote. The heading has been changed in the Kazakh language, the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

In accordance with subparagraph 19-56) of paragraph 21 of the Regulation on the Ministry of Defense of the Republic of Kazakhstan approved by Decree No. 1074 of the Government of the Republic of Kazakhstan as of August 16, 2001, I hereby ORDER:

**Footnote. The preamble has been amended in the Kazakh language, the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

1. To approve the appended Instruction for fire safety measures in the Armed Forces of the Republic of Kazakhstan.

**Footnote. Paragraph 1 was amended in the Kazakh language, the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

2. In accordance with the procedure established by the legislation of the Republic of Kazakhstan, the Chief of Logistics and Armaments of the Armed Forces of the Republic of Kazakhstan shall:

1) ensure the registration of this order in State Registration Register of Regulatory Legal Acts of the Republic of Kazakhstan;

2) within ten calendar days of the state registration, send this order's copy to the Republican State Enterprise with the Right of Economic Management "Institute of Legislation and Legal Information" of the Ministry of Justice of the Republic of Kazakhstan for its official publication and inclusion into the Reference Control Bank of Regulatory Legal Acts of the Republic of Kazakhstan in Kazakh and Russian;

3) place this order on the website of the Ministry of Defense of the Republic of Kazakhstan after its first official publication;

4) within ten working days of the state registration, submit information on the implementation of measures, provided for in subparagraphs 1), 2) and 3) of paragraph 2, to the Legal Department of the Ministry of Defense of the Republic of Kazakhstan.

**Footnote. Paragraph 2 was amended in the Kazakh language, the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

3. To impose control over the execution of this order on the supervising Deputy Minister of Defense of the Republic of Kazakhstan.

**Footnote. Paragraph 3 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

4. This order shall be brought to the notice of officials to the extent it is applicable to them.

**Footnote. Paragraph 4 was amended in the Kazakh language, the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

5. This order shall take effect ten calendar days after its first official publication.

**Footnote. Paragraph 5 was amended in the Kazakh language, the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

*Minister of Defense of  
the Republic of Kazakhstan  
Major General*

*N. Yermekbayev*

"AGREED"

Ministry of Internal Affairs of  
the Republic of Kazakhstan

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" " \_\_\_\_\_ 2019

Approved by  
Order № 378 of the

## **Instruction for fire safety measures in the Armed Forces of the Republic of Kazakhstan**

### **Chapter 1. General provisions**

1. The Instruction for fire safety measures in the Armed Forces of the Republic of Kazakhstan (hereinafter referred to as the Instruction) details the fire safety measures in the Armed Forces of the Republic of Kazakhstan (hereinafter referred to as the Armed Forces of the Republic of Kazakhstan).

**Footnote. Paragraph 1 was amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

2. The fire safety measures include:

1) the organization of the fire protection service (fire unit, fire watch service, fire protection teams (fire crews), provision with firefighting equipment);

2) the organization of fire prevention activities (carrying out fire prevention activities, fire prevention training of the personnel, fire safety and technical inspection of the fire protection situation in military units (institutions), fire safety measures at facilities).

**Footnote. Paragraph 2 was amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

3. The main terms used in this Instruction are as follows:

1) fire protection of the Armed Forces of the Republic of Kazakhstan - a set of measures, including forecasting and analysis of fire hazard, taking fire prevention measures, introducing technical means for detecting and extinguishing fires, creating conditions for the protection and safe evacuation of people, weapons, military equipment and military property;

2) fire prevention - a set of organizational and technical measures aimed at ensuring the safety of people, preventing fire, restricting its spread, as well as creating conditions for successful firefighting;

3) fire station – a place or site intended for the organization of fire protection.

4) fire authority - the fire protection service of the Armed Forces of the Republic of Kazakhstan, of branches, service branches, regional commands and garrisons.

**Footnote. Paragraph 3 was amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of**

Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

## **Chapter 2. Organization of fire protection service and fire safety measures**

### **Clause 1. Organization of fire protection services of the Armed Forces of the Republic of Kazakhstan**

4. In order to ensure fire safety measures for the facilities of a military unit (institution) and create a safe environment for the personnel, the unit commander (head of the institution) organizes timely firefighting measures for the personnel of military units and institutions in the form of their training in the fire safety requirements specified in Decree No. 1077 of the Government of the Republic of Kazakhstan as of October 9, 2014 “On approval of the Fire Safety Rules” (hereinafter referred to as the FSR).

Footnote. Paragraph 4 was amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

5. Officials of the fire protection service and the daily duty of the military unit (institution) shall monitor the fulfilment of the requirements of the fire safety regulations by the personnel, in the event of a fire; they shall immediately inform the territorial divisions of the authorized body in the field of civil protection.

Footnote. Paragraph 5 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

6. The fire protection service in military units and institutions (garrisons) is carried out by:

- 1) full-time fire protection teams;
- 2) emergency firefighting teams.

7. The personnel of full-time fire protection teams, emergency firefighting teams and crews shall be exempt from duties and activities not related to the fire protection service.

8. It is not allowed to use firefighting equipment (motor pumps), equipment and tools other than as intended, and also to accommodate persons, units and equipment not related to the fire protection service in fire stations' buildings.

### **Clause 2. Fire unit**

9. In order to carry out the fire prevention and extinguishing service, and also to perform emergency rescue operations, it is necessary to assign a day-duty fire unit

from among the personnel of the fire protection team. The rest of the personnel are the reserve of the fire protection team.

10. The service carried out by a fire unit is considered to be their combat mission and requires the personnel to strictly comply with the requirements of the Internal Service Regulations of the Armed Forces, other troops and military units of the Republic of Kazakhstan approved by Decree No. 364 of the President of the Republic of Kazakhstan as of July 5, 2007 (hereinafter referred to as the ISR) and this Instruction.

The composition of the unit depends on the number of the personnel of the fire protection team and the presence of fire engines.

**Footnote. Paragraph 10 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

11. The day-duty fire unit shall include:

1) chief of the unit;

2) drivers (engine operators);

3) firefighter (firefighter - rescuer) depending on the number of special and converted fire engines, trucks (motor pumps) in service, as well as equipment intended for priority rescue operations;

4) fire watches depending on the number of fire stations.

12. On public holidays and when performing massive loading and unloading operations in the premises of protected facilities (arsenals, bases, depots) associated with increased fire hazard, by decision of the commander of the military unit (head of the institution), for the purposes of fire safety enhancement, the day-duty fire unit is increased by the personnel from the reserve of the fire protection team protection or other units of the military unit (institution).

**Footnote. Paragraph 12 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

### **Clause 3. Fire watch service**

13. When operations are performed at most fire hazardous facilities or during a thunderstorm, it is necessary to post fire stations.

14. A combat crew in a fire truck is assigned to ensure fire protection in the course of fire hazardous, massive loading and unloading and scheduled operations at guarded facilities, fueling and launching missiles, and flights of aircraft (helicopters).

15. Combat-capable reserve personnel remain in the fire protection team and telephone (radio) communication with the worksite is arranged for them.

16. Fire stations are posted to:

1) prevent fires;

2) timely call the fire protection team in the event of a fire at or near the station;

3) suppress fires at the station using available fire extinguishing equipment.

17. In military towns (institutions) located in the forest zone or having mainly wooden buildings, and also without fire alarm and telephone communications, stations are arranged at watch towers to detect fires and report thereon to the fire protection team.

18. Fire stations, depending on the significance of protected facilities, their fire hazard level and time of service, can be either regular or temporary.

19. The number and location of fire stations are determined in the day-duty fire unit statement in accordance with the form in Appendix 1 to this Instruction, which is developed by the head of the fire protection team.

The station shall have telephone communication with the fire protection team and firefighting equipment.

Footnote. Paragraph 19 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

20. A fire watch of the fire station shall report to the head of the fire unit.

21. To change fire watches, the head of the fire unit forms the single rank of fire watches of the next shift in the garage of the fire protection team's depot and gives instructions on the service.

Footnote. Paragraph 21 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

#### **Clause 4. Fire protection teams (fire crews)**

22. In military units (institutions), full-time fire protection teams are staffed by the servicemen of the Armed Forces of the Republic of Kazakhstan. It is not allowed to include compulsory-duty servicemen in fire protection teams.

Footnote. Paragraph 22 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).



23. The number and type of fire trucks (motor pumps) is determined in accordance with the standards for peacetime supply with firefighting equipment of the Armed Forces of the Republic of Kazakhstan approved by Order No. 348 of the Minister of Defense of the Republic of Kazakhstan as of June 17, 2015 (registered in the State Register of Regulatory Legal Acts of the Republic of Kazakhstan under No. 11741 on July 24, 2015).

Footnote. Paragraph 23 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

24. Fire protection teams consist of squads. Combat crews for fire trucks are assigned from among the squad personnel.

25. The number of fire crew personnel depends on performance characteristics of firefighting equipment and shall be able to fully deploy fire extinguishing equipment, carry out rescue operations and service in a fire unit.

26. If the number of the personnel of a fire protection squad is insufficient for performing high-quality service, the full-time personnel, by order of the commander of the military unit (head of the institution), is complemented with additional personnel of at least 5 people.

27. In a military unit (institution) without a full-time fire protection team, an emergency firefighting team of 5-15 people is set up by order of the commander of the military unit (head of the institution).

28. A fire unit shall be assigned from the fire protection team to be on duty at fire stations around-the-clock or for the time specified by the commander of the military unit (head of the institution).

29. In military towns where several military units (establishments) are quartered, by decision of the garrison head, it is allowed to set up one combined garrison emergency firefighting team.

Footnote. Paragraph 29 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

30. Daily, a fire unit is assigned from the emergency firefighting team that reports to the duty officer of the unit (institution) and the head of the emergency firefighting team.

31. The fire unit shall include:

1) chief of the unit;

2) drivers (engine operators) by the number of fire trucks (motor pumps).

Footnote. Paragraph 31 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

32. Non-staff fire brigades shall be provided with fire trucks or vehicles adapted for extinguishing, motor pumps, as well as fire equipment, in accordance with the staffing of the military unit (institution).

Footnote. Paragraph 32 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

33. At sites where operations with military property and military equipment are performed, fire crews are assigned to monitor compliance with the FSR, to extinguish fires and evacuate property (equipment).

Footnote. Paragraph 33 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

34. Fire crews are entrusted with monitoring the implementation of fire safety measures at the worksites, reporting a fire, putting out fires and evacuating property (equipment).

35. Daily, a company duty officer assigns a fire crew, against the possibility of a fire in subunits of military units (institutions), after the evening roll-call (working day).

Footnote. Paragraph 35 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

#### **Clause 5. Provision with firefighting equipment**

36. Fire protection of formations, military units (institutions) of the Armed Forces of the Republic of Kazakhstan is provided by state institutions - budget program administrators.

37. The main troops housing directorate ensures the installation, maintenance and repair of:

- 1) automatic fire alarm;
- 2) automatic fire extinguishing systems during major construction and repair;
- 3) lightning protection devices;
- 4) external and internal fire water supply (fire-cocks, hydrants, ponds);
- 5) electrical facilities;



6) earth walls around groups of ground storage tanks of the depots of fuel and lubricants, storage facilities for rockets, weapons and ammunition.

Footnote. Paragraph 37 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

38. The fire protection department provides firefighting products such as;

- 1) tracked fire engines;
- 2) fire trucks and components for firefighting equipment;
- 3) portable and mobile fire pumps;
- 4) all types of vehicle-transported, portable and mobile fire extinguishers;
- 5) personal protective equipment (fire-entry suit);
- 6) fire hoses of all diameters;
- 7) fire shields with fire extinguishing tools;
- 8) consumables (foaming agent, flame retardant).

### **Chapter 3. Organization of fire prevention activities**

Footnote. The heading of section 3 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

#### **Clause 1. Planning of activities**

39. The officials of fire authorities work in accordance with monthly action plans.

The plans are approved by the commander of the military unit, the head of the institution in charge of the fire protection service.

Footnote. Paragraph 39 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

40. Monthly action plans are drawn up with account of fire prevention activities and analysis of the fire situation.

Footnote. Paragraph 40 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

41. Action plans are drawn up so that a stay for inspecting and providing practical assistance to the command of the unit (institution) directly in the military unit (institution) does not exceed one day.

42. The action plan provides for special inspections of:

1) heating installations, stoves, chimneys - before the start of the heating season, and also after cleaning the chimneys from soot, repairs, but at least once a month;

2) electrical equipment - once a quarter (in clubs, officers' houses - at least once a month);

3) basements and attic rooms of buildings - once a month;

4) fire ponds, hydrants, fire-cocks with water intake and launch - in spring and autumn.

43. The list of activities is included as a separate section in the monthly plan of organizational and preventive measures and fatigue duty of the fire protection team of the military unit (institution) in accordance with the form in Appendix 2 to this Instruction.

**Footnote. Paragraph 43 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

44. The entire personnel of the fire protection team are involved in fire prevention activities. The inspection of the fire situation in buildings and structures is carried out within the following time frames:

1) daily, at work and after a working day is over, before closing - with respect to depots, storage facilities, open storage areas, workshops, workrooms, work centers with equipment and property, hangars, garages, parks and other fire hazardous facilities ;

2) at least once a week - with respect to barracks, dormitories, headquarters, clubs, canteens, bath-and-laundry rooms, boiler rooms, medical aid posts, gyms, training buildings, shops, libraries.

45. Every year during the fire season, the integrated commissions of state institutions of the Armed Forces of the Republic of Kazakhstan and scheduled inspections check the fire situation in the missile and artillery depots (hereinafter referred to as the MAD) of military units, arsenals and weapon (ammunition) storage bases.

**Footnote. Paragraph 45 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

## **Clause 2. Performance of fire prevention activities**

46. Fire prevention activities are carried out by:

- 1) the head of the fire protection service (team) - daily;
- 2) the personnel of the fire protection team, except for drivers, - when on duty at fire stations.

**Footnote. Paragraph 46 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

47. The officials of the fire protection team report the inspection results to the commander (head) of the inspected unit (facility) and the head of the fire protection team (service).

Defects discovered during the inspection and not corrected in the presence of the inspector or requiring the funds' allocation and time to correct them are recorded in the log of fire prevention activities of the fire protection team in accordance with the form in Appendix 3 to this Instruction.

In cases of failure to correct defects within the established time frames, the head of the service, fire protection team reports this to the unit commander (head of the institution).

48. The list of explosion and fire hazardous buildings and structures (storage facilities, depots, parks, hangars, workshops and workrooms) subject to daily inspection by representatives of the fire department of the unit (institution) in the presence of those responsible for the fire situation in these facilities is approved by order of the commander of the military unit (head of the institution).

**Footnote. Paragraph 48 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

49. The inspection is considered complete after checking all the rooms, correcting the defects discovered, de-energizing electrical installations, disconnecting and sealing the external switch, locking and sealing the front door.

Inspection results are recorded in the log of inspections of fire situation in the facilities before their closing in accordance with the form in Appendix 4 to this Instruction.

50. Works on maintenance and repair of an automatic fire extinguishing installation, application of flame retardants (impregnation), recharging, testing and repair of all

types of fire extinguishers, operational tests of external fire escapes and fences on the roofs of buildings and structures shall be carried out at the expense of funds directly from the interested state institution (balance holder).

Footnote. Paragraph 50 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

### **Clause 3. Fire prevention training of the personnel**

51. Fire prevention training is organized and carried out with the aim of teaching the personnel of military units (institutions) to apply fire prevention measures, handle firefighting equipment and act in the event of a fire.

Footnote. Paragraph 51 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

52. At arsenals, bases, depots, enterprises and military units (institutions) with fire hazardous production, newly recruited civilian personnel (employees) and workers are trained in fire safety measures and actions in the event of fire, the information thereon is recorded in the register of fire protection training of the personnel of a military unit (institution) in accordance with the form in Appendix 5 to this Instruction.

When applying for a job, relevant briefing is carried out by the head of the fire protection service, repeated briefing - right at the workplace by those responsible for the fire situation in a facility (depot, workshop and workroom).

53. The training of commanders of military units (heads of institutions) and officials responsible for fire safety in a fire safety basics in terms of knowledge of the requirements of regulatory legal acts in the field of fire safety regarding the fire regime and the training of full-time fire protection teams in the specialties is carried out by military units (institutions).

Footnote. Paragraph 53 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

### **Clause 4. Fire safety and technical inspection of military units (institutions)**

54. The basic form of fire authorities' work is the provision of practical assistance to commanders (heads) in addressing issues of fire protection of facilities, enhancing

the effectiveness of the personnel's work on preventing fires, training military personnel in fire safety measures and actions in the event of fire, introducing successful practices, forms and methods of preventive activities.

55. In order to prevent fires, fire authorities of the Armed Forces of the Republic of Kazakhstan exercise control over:

- 1) the organization and state of fire protection;
- 2) fire prevention;
- 3) the work of firefighting commissions, services and full-time fire protection teams;
- 4) the availability, condition and maintenance of documents of the fire protection team.

56. In full-time fire protection teams, it is necessary to check:

- 1) the organization and performance of the fire unit's service, the maintenance of fire equipment and the observance of internal order in the fire protection team;
- 2) the organization of special training;
- 3) the personnel's knowledge of their responsibilities according to the personnel table of combat crews of fire trucks, tracked fire engines and motor pumps in accordance with the form in Appendix 6 to this Instruction;
- 4) the condition of fire hoses;
- 5) the subunit's practical knowledge of their actions in case of a training fire;
- 6) correct performance of special training exercises by fire protection teams of the Armed Forces of the Republic of Kazakhstan in accordance with Appendix 7 to this Instruction.

57. In emergency firefighting teams, it is necessary to check:

- 1) the personnel's knowledge of instructions for fire safety measures in a military unit (institution);
- 2) the personnel's knowledge how to call the nearest fire protection team, give a fire alarm and activate the fire equipment and tools in service of the emergency firefighting team;
- 3) the subunit's practical knowledge of their actions in case of a training fire.

58. When checking the combat readiness of fire protection teams, the practical training and actions of the fire protection team are checked according to the fire protection plan approved by the commanders of the military unit (institution).

59. Depending on the purpose of the fire safety and technical inspection, one can give a training fire alarm that may be either:

- 1) private – when calling and deploying only the fire protection team of the military unit (garrison); or
- 2) garrison – when calling all the personnel and equipment provided for by the garrison fire protection plan.

In the course of training, the inspector can give additional incidents to complicate the situation.

60. It is not allowed to interfere with the inspector's actions, except in cases of violation of safety rules by the personnel operating fire equipment and tools.

61. In the course of fire protection training, it is necessary to fix the time of:

- 1) raising alarm;
- 2) receiving a "fire" message by the fire protection team;
- 3) arrival of fire trucks at the place of call;
- 4) end of deployment of the personnel and means of each firefighting machinery (equipment);
- 5) water (foam) supply from fire-hose nozzles;
- 6) arrival of the unit personnel and vehicles for the evacuation of property.

62. Based on the results of a fire safety and technical inspection of the fire protection organization and situation in a military unit (institution), the inspector draws up an on-site act of inspection of the fire protection organization and situation in accordance with the form in Appendix 8 to this Instruction.

Proposals to address defects discovered in the fire protection organization and situation shall be brief and corrected within 30 calendar days.

A fire safety and technical inspection shall be carried out in the presence of the head of the fire protection team or a person officially acting for him.

**Footnote. Paragraph 62 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

#### **Chapter 4. Fire safety measures**

**Footnote. The title of paragraph 4 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

##### **Clause 1. Fire safety measures in the premises of a military unit (institution)**

63. It is not allowed to make open fire closer than 50 meters (hereinafter - m) from buildings and storage sites for property and vehicles.

Special areas are designated for smoking in the administrative area.

64. Fire equipment, ponds, fire-cocks, hydrants, pumps, motor pumps are kept intact and fully operational, and their location is indicated by signs. In winter, all sources of fire water supply are insulated.



65. Workrooms, storage facilities, depots, parks (garages), hangars, workshops, permanent and temporary work points, and other fire-hazardous premises are inspected daily before closing by the officials in charge of these premises and by the fire unit personnel.

Defects discovered during the premises' inspection shall be corrected before closing.

**Footnote. Paragraph 65 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

66. Results of the premises' inspection are recorded in the register of inspections of fire protection of military units and fire prevention activities in accordance with the form in Appendix 9 to this Instruction. After the premises are closed, the official in charge of the premises is given a fire tag issued in accordance with the form in Appendix 10 to this Instruction.

The officials in charge of the premises hand over the keys to the premises and tags to the person on duty in the park, depot area (technical area).

In these cases, a fire tag confirms the compliance with fire safety requirements. A duty guard in the park, depot area (technical area), at the time of putting the facility under protection, passes the tags to the guard commander, who keeps them till the next-day operations begin.

## **Clause 2. Fire safety measures when troops are deployed in camps**

67. When deploying a military unit in camps, the head of the camp assembly organizes fire safety and monitors the state of fire safety in the camp. Fire crews shall be set up in the camp.

68. Tents pitched in the camp are arranged in three or two along the front of the subunit. The distance between adjacent tents is 2.5 m along the front, and 5 m depthward.

69. Smoking areas are arranged no closer than 15 m from the tents. Smoking and storage of flammable substances, flammable liquids in tents are not allowed.

70. When installing metal stoves in a tent, it is necessary to take fire safety measures such as:

1) when installing metal stoves with legs, the wooden floor under the stove is insulated as follows: the height of the legs of unlined metal stoves is at least 0.2 m; the combustible floor under the stoves is insulated with bricks laid flatwise;

2) when installing metal stoves without legs, the base under the stoves is made of bricks laid flatwise;

3) metal stoves are installed at a distance of at least 1 m from wooden structures that are not protected against fire, and at least 0.7 m from structures protected against fire;

4) pre-stove plate of roofing steel the size of 0.7 x 0.5 m is fixed in front of the stove hole or a one-row brick flooring of the same size is made;

5) metal stoves are installed no closer than 1 m from the canvases of tents and combustible items;

6) the distance from the stove door to the tent canvas is at least 1.25 m.

71. When installing chimneys made of roofing steel, it is necessary to observe the requirements such as:

1) pipe rings are tightly interconnected in the direction of smoke movement and to a depth not less than half the pipe diameter;

2) when the pipe passes through a hole in the roof or through a window, sheets of roofing steel of at least three pipe diameters are inserted into them;

3) pipes are installed at a distance of 0.7 m from the combustible canvases of tents;

4) when taking pipes out through roof holes and windows, they shall rise above the cornice by 1 m and end with a spark arrester.

72. It is allowed to stoke a stove under constant supervision of instructed stokers appointed by order of the unit commander.

73. When stoking a stove, it is not allowed to:

1) leave the stove unattended;

2) stoke using combustible liquids;

3) overheat stoves;

4) dry clothes, fuel and combustible items on stoves, chimneys and in close proximity thereto;

5) leave open the door of a stove being stoked;

6) stoke malfunctioning stoves with cracks and defective doors;

7) use fire wood that is longer than the firebox.

74. The points of electric wire input in tents are insulated, and the wires themselves are securely fixed. Electric lamps are placed no closer than 40 centimeters from the tent canvas and other combustible property.

It is not allowed to connect electric heaters, to wrap light bulbs with paper (cloth).

75. For the purposes of fire prevention in the camp, it is necessary to take such fire safety measures as:

1) the equipment area shall be no closer than 50 m from the tents;

2) the area for installation of field kitchens shall be no closer than 25 m from the tents;

3) to avoid the passage of lightning from a tree onto tents, it is not allowed to place them closer than 10 m from the trees.

76. In the field, the firefighting property (tools) is (are) placed so that it (they) can be rapidly used by the personnel in the event of a fire. To store fire extinguishing equipment in the camp, it is necessary to arrange fire shields – one per 2 tents, regardless of their capacity.

Footnote. Paragraph 76 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

77. The number of fire extinguishers in tents is:

- 1) two pieces per one 40-person tent;
- 2) one piece per one 20-person tent or a tent for auxiliary purposes (camp tent).

### **Clause 3. Fire safety measures during the operation of electrical installations**

78. All buildings, structures and installations of the combat vehicle (hereinafter referred to as CV) fleet, for which spark discharge and generation of static electricity are unacceptable, are subject to protection from the effects of static electricity.

79. The CV fleet is protected from static electricity by grounding all metal pipelines, vessels, tanks, structures and equipment parts on which static charges can be generated. Grounding conductors protecting against secondary lightning effects can be used as grounding conductors protecting against static electricity.

80. Depots are supplied with electricity from the local network of the state electric system or from their own autonomous stationary diesel power station.

Military mobile power plants are used as a backup power source.

81. Transformer substations that receive electricity from the electric network of the state power system are located in the administrative area, and are closed-type.

Only the technical area consumers are connected to the low voltage busbars of the substations in the technical area.

82. Distances from the outer wire fence of the security perimeter of the technical area to overhead power lines designed for power supply of the depot only shall be at least:

- 1) 400 m – at a voltage over 35 kV;
- 2) 200 m – at a voltage from 10 to 35 kV;
- 3) 100 m – at the voltage of 3 and 6 kV;
- 4) 50 m - at voltages up to 1 kV.

83. All external power supply networks in the technical area and their security perimeters are made of cables laid in the ground (trench). In difficult geological conditions (rocky, swampy and heaving soils), cables can be laid in above-ground reinforced concrete enclosed channels, and:

- 1) cables used shall be armored with non-flame retardant coating on top of the armor;
- 2) reinforced concrete channels are laid on special concrete platforms with a slope of at least 2% along the planned route in such a way as not to interfere with the storm water runoff;
- 3) the cable shall be laid in the ground for at least 50 m before entering the building

84. In storage facilities and depots, electric wires of the lighting network and electric lamps are located only above the aisles. The suspension height of electric lamps in industrial premises of all hazard categories shall be at least 2.5 m from the floor.

**Footnote. Paragraph 84 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

85. The external lighting of the technical area is installed separately and independently of the external lighting of other depot areas. The guarded perimeters' lighting is controlled from the guardhouse. This lighting is controlled remotely and automatically with devices sensitive to the level of natural light.

The depot's technical service shall have the approved design of the power supply system with an explanatory note, accompanying operational documents for all installed electrical equipment and a backup power source, acts of hidden works on the installation of grounding conductors and their assembling, as well as measurements of their resistors, which shall be used during operations.

86. Transformers and substations meeting production needs and providing security lighting of the depot area shall be installed outside the fence.

Mobile power plants shall be placed at a distance of at least 25 m from storage facilities or loading and unloading points, and portable light points - at a distance of at least 5 m from ammunition stacks.

Electricity from a mobile power plant is supplied to electric motors, transformers and light points via a cable with intact insulation.

When illuminating storage facilities and loading and unloading platforms, the switchgear shall be installed in a metal cabinet on a pole no closer than 5 m from the storage facility or the platform.

To supply power to engines and starters, it is necessary to use a wire in gas pipes or an armored cable.

When using portable electric lamps, it is also necessary to have glass caps, safety nets, flexible wire in a rubber hose and powered by a voltage of no higher than 24 V. It is necessary to check the wire insulation regularly with a megger at least once a month.

To lay the lighting network at work sites, it is necessary to use a wire in gas pipes with a group circuit for switching on lighting fixtures. Lighting fixtures shall be sealed and explosion-proof.

Electricity is supplied to the depot area from one point. After completion of works, the line is disconnected, the switchgear is locked and sealed.

**Footnote. Paragraph 86 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

87. The operation and installation of electrical installations of the bases is carried out in accordance with the requirements of the Rules for the installation of electrical equipment approved by Order No. 230 of the Minister of Energy of the Republic of Kazakhstan as of March 20, 2015 (registered in the State Register of Regulatory Legal Acts of the Republic of Kazakhstan under No. 10851) (hereinafter referred to as the RIE).

88. Explosion and fire hazardous buildings and facilities of the bases are supplied with electrical equipment in accordance with this Instruction and the RIE.

89. Electrical equipment of administrative, residential, public buildings, workshops, battery charging stations, boiler rooms, pumping stations, as well as administrative and amenity premises in the production facilities of the bases, including those for the work with missiles and ammunition, is selected and installed in accordance with the RIE general requirement.

90. It is permitted to use electric lighting in storage facilities subject to the observance of fire safety measures. In ammunition storage facilities, only low-voltage electric lighting with a voltage of no more than 24 V is allowed.

The circuit breaker (switch) of each storage facility is placed outside the storage facility at the front door in metal cabinets that are locked and sealed by the manager of the storage facility. At the end of work, the circuit breaker is turned off and the storage facilities are de-energized.

91. For the purposes of fire safety, it is not allowed to:

- 1) repair equipment and electric power networks by persons without special training and permit to perform these works;
- 2) stick or cover the wires with wallpaper, posters and other combustible facing materials;
- 3) use connected wires for the lighting network.

#### **Clause 4. Fire safety measures in combat vehicle fleets (garages) and hangars**

92. Vehicles kept indoors and under sheds shall be positioned with their engines towards the gates.

93. There shall be no more than 2 rows of vehicles in parking lots and under sheds.

94. The distance between vehicles and building elements shall be:

1) 0.8 m - between vehicles, and also between a wall and a vehicle in a parallel position to this wall;

2) 0.7 m - between the front of a vehicle and a wall or the gate;

3) 0.5 m - between the rear of a vehicle and a wall or the gate;

4) 0.6 m - between vehicles standing one after another;

For vehicles kept in open areas and under sheds, these distances increase by 0.1 m.

95. With regard to vehicles kept in combustible storage facilities and under combustible sheds, there shall fire walls (diversion walls) separating every 10 vehicles in sheds and storage facilities.

96. With regard to vehicles kept in open areas, it is necessary to observe the following requirements:

1) vehicles are positioned in groups of no more than 50 vehicles in a row at a distance of 1.5 - 2 m from each other along the front;

2) the distance between the rows shall be at least 10 m, and between groups - 20 m.

97. To ensure the immediate departure of vehicles (aircraft) in the event of a fire, duty tractor trucks with towing equipment and the required number of military personnel are assigned daily.

**Footnote. Paragraph 97 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

98. The procedure for the long-term storage of vehicles is as follows:

1) fuel tanks of vehicles with carburetor engines are not filled, and their internal surfaces are washed and treated with motor preservation oil. The fuel tanks of vehicles with diesel engines are kept filled. In exceptional cases, subject to appropriate fire safety measures, it is allowed to keep vehicles with tanks filled with gasoline and change it in a timely manner. The CV fleet is arranged, planned (in terms of mutual disposition of buildings and structures) and equipped in accordance with fire safety requirements.

**Footnote. Paragraph 98 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

99. The area for maintenance and repair of weapons and military equipment (hereinafter referred to as the WME) of the CV fleet houses:

1) fire hydrants or ponds;

2) platforms for duty and firefighting equipment.



Footnote. Paragraph 99 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

100. In the absence of a standard fire engine house, duty personnel and firefighting equipment shall be located in one row in heated storage facilities. There shall be a separate exit for each WME type.

101. The platform for duty equipment of the field maintenance park is located next to the technical control point (hereinafter referred to as TCP). Duty trucked and wheeled tractors, fire truck are placed in one row.

102. Additionally, an area for storing fire extinguishers at sub-zero ambient temperatures is equipped in the TCP building.

103. The gas station ensures fire safety of the acceptance, storage and delivery of fuel and lubricants.

104. The point of maintenance and repair of vehicles, as well as each storage facility is equipped with:

- 1) internal firefighting pipe;
- 2) fire alarm.

105. Subject to compliance with the requirements and implementation of fire-fighting measures, at storage sites (parking lots) it is permitted to carry out:

- 1) maintenance during storage;
- 2) battery charge with low currents;
- 3) removal of rechargeable batteries for a charge and their installation in vehicles;
- 4) fueling and draining the cooling liquid in winter;
- 5) works related to starting the engine and WME;
- 6) refueling with combustible lubricants after preservation (placement into storage)

;

- 7) loading and unloading of ammunition;

8) WME transition to summer (winter) operating mode. At the same time, heater adjustment is carried out at sites in front of the storage facilities only on the WME with unloaded ammunition.

106. Heated storage facilities are equipped for the placement and maintenance of fire engines, duty tractor trucks.

107. Battery rooms are classified as fire hazardous and explosive areas.

108. Portable fire extinguishers for 200 m<sup>2</sup> of premises are located in the battery charging station. Fire extinguishers are installed in prominent and convenient places.

109. In the depot buildings, it is necessary to arrange and separate from each other by fire walls the premises for storing military-technical property (hereinafter referred

to as MTP) of the immediate reserve, emergency stock, premises for MTP processing and re-conservation.

Each room has a separate exit to the outside.

110. Depots for paints and varnishes and chemical materials are arranged in a semi-hardened room or a semi-hardened building at a distance of at least 10 m from other buildings of the CV fleet. The storage room for paints and varnishes is separated from the storage room for chemical materials by a fire wall.

111. To accept, issue and keep records of property in depots, it is necessary to arrange workplaces for depot managers, which are separated within the depot premises with partitions (that can be glazed or mesh with the height of a blind part not more than 1.2 m, collapsible and sliding).

The workplace for accepting property and preparing it for issuance shall have fire equipment and tools, a fire crew stand.

112. A decision to build and equip sites for various purposes in the CV fleet area is made by the commander of the military unit based on the planning and placement of its elements, tasks assigned to the military unit.

In addition to the maintenance and TCP sites, it is necessary to build and equip sites for technical inspection of ammunition, placement of duty and firefighting equipment.

113. The site for technical inspection of ammunition is equipped only if the artillery supply depot of the military unit is at a significant distance away and is intended for technical inspection of ammunition of CVs placed in storage with ammunition loaded. The site shall be 15 x 15 m, at least 40 m far from the fleet buildings and structures. When the site is walled, this distance is reduced to 25 m. The distance to the fueling point (fuel and lubricants depot) and open flame sources must be at least 300 m.

The site is equipped with lightning protection device and fire equipment.

If the CV fleet area is not sufficient to place the site at a safe distance from buildings and structures, it shall be arranged next to the fleet area.

Ammunition for on-site work is fed from vehicles in standard containers (canning).

114. In the absence of a heated room for duty equipment, it is necessary to arrange a site for them. It shall be near the TCP and illuminated. The dimensions of the site are 10 x 30 m.

Near the site, and also with the room for duty equipment, it is necessary to arrange a central fire station, in order to concentrate additional fire extinguishing equipment in one place.

The fire station shall have fire extinguishers, shovels and buckets (10 pieces each), crowbars, axes and metal hooks (5 pieces each).

115. The planting of trees and shrubs may not increase the fire hazard of the CV fleet area, hinder the access of a fire truck to buildings and structures, and impede the visibility of the territory of the fleet area for sentries on duty, day-duty personnel in the fleet area and fire unit.

The distance from tree plantations to roads, buildings and structures of the CV fleet area is determined with account of further growth of tree plantations.

**Footnote. Paragraph 115 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

116. During the personnel's work in the CV fleet area, a fire patrol (1 - 2 people) is assigned from the full-time fire protection team or emergency firefighting team of the military unit, whose task is to monitor the implementation of fire safety requirements, take measures to prevent fires and report thereon.

117. During works in CV fleet areas and in all rooms, it is necessary to assign fire crews from among the full-time or temporary personnel. Fire crews are entrusted with monitoring the implementation of fire safety requirements at work sites and in the units, extinguishing fires and evacuating property.

Fire crews' responsibilities in CV fleet area are determined by the unit commanders. The surnames of the crew personnel and their responsibilities are indicated on the fire crew stand. The crew supervisors are unit commanders (work managers).

118. In addition to fire breaks, it is necessary to arrange protective zones in the CV fleet area as barriers to the spread of fire in it. It is not allowed to stock and store military-technical property (hereinafter referred to as MTP) within the protective zone and fire breaks.

119. To prevent the formation of explosive mixtures due to the ingress of petroleum products into the wastewater during WME washing, the wastewater is treated at treatment facilities of the washing stations.

120. The storage of combustible liquids and materials in containers is allowed no closer than 50 m from the CV fleet buildings and open storage areas shall be equipped with a side drain.

To unscrew the metal plugs of containers, it is necessary to use a special intrinsically safe tool.

It is not allowed to use tools (hammer, chisel) able to strike sparks.

121. Stations of parts' flushing are located in isolated CV fleet areas, which are equipped with forced supply and exhaust ventilation. All electrical equipment of the stations is explosion-proof. Flushing baths are installed permanently, equipped with tight-fitting lids and local suction eliminating the ingress of liquid vapor into the room airspace. Fire-safe technical detergents shall be used as flushing fluids.

Footnote. Paragraph 121 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

122. The CV fleet rooms for technological process accompanied by the release of explosive gases and mixtures are equipped with natural and forced supply and exhaust ventilation.

Footnote. Paragraph 122 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

123. The chimneys of the CV fleet boiler rooms shall rise no less than 5 m above the buildings' roofs. When removing ash and slag, they shall be poured with water and carried out of the CV fleet area.

124. When operating boiler rooms using liquid fuel, it is necessary to meet the following fire safety requirements:

1) it is allowed to install supply fuel tanks indoors no closer than 5 m from the boilers (for tanks up to 1 m<sup>3</sup>), and with a larger capacity, the fuel tanks are separated from the boiler room by fire walls or are placed outside;

2) there shall be at least two valves on the pipeline connecting the supply tank with the nozzle;

3) only factory-made nozzles are used;

4) supply tanks are equipped with overflow pipelines that are connected to a drain tank installed outside the building;

5) it is not allowed to install valves and latches on the overflow pipe, and also liquid-level glass tubes on the fuel tanks.

125. For timely fire alert, the necessary number of sound signaling devices is installed in the CV fleet area.

A decision to equip the CV fleet area with loud-speaking and telephone communications between the CV fleet elements is made by the commander of the military unit based on the tasks assigned to the military unit.

126. For the fire prevention in CV fleet area, it is not allowed to:

1) place and store tanks with fuel;

2) use fire hazardous heaters;

3) fuel WME (aircraft) with fuel in parking lots;

4) keep WME (aircraft) with leaking fuel tanks and fuel wires;

5) store fuels and lubricants, except those in tanks, and empty containers at parking lots;

- 6) rinse and clean covers, hoods and clothing with kerosene, gasoline or other flammable liquids;
- 7) store oiled rags, covers, special clothes in WME;
- 8) use open fire and storm lanterns at parking lots and when fueling;
- 9) clutter up the gates in WME storage facilities, use them as storage rooms, workshops and housing;
- 10) close the gates to the storage facilities of vehicles (aircraft) with locks, metal cables and internal locks;
- 11) violate the order of disposition;
- 12) store WME with open and not sealed fuel tanks;
- 13) warm up the WME units using open fire;
- 14) leave WME at parking lots with the ignition on;
- 15) locate offices in the WME storage facilities;
- 16) store flammable materials and combustible liquids in the boiler room, except for those available in supply tanks;
- 17) allow the presence of unauthorized persons and the rest of the duty shift operators in the boiler room;
- 18) leave operating boilers unattended and use open fire to heat fuel pipes and fuel tanks of the boiler room;
- 19) admit persons with failed hot work tests to work without checking their knowledge of fire safety requirements;
- 20) start operation of faulty hot work equipment;
- 21) carry out hot work at WME parking lots;
- 22) fuel ungrounded aircraft;
- 23) warm up and start aircraft engines;
- 24) allow vehicles without fire extinguishing means in the aerodrome;
- 25) use overalls and gloves with traces of oils and flammable liquids when performing hot work;
- 26) allow the rest and accommodation of personnel in a battery charging station;
- 27) use electrical equipment that is not explosion-proof;
- 28) put stoves and use electric heaters in a battery charging station;
- 29) make fire closer than 40 m from buildings, sites with MTP and equipment, and also to smoke and use open-fire appliances in storage facilities, depots and other fire hazardous rooms;
- 30) heat frozen water pipes and other pipes in buildings using open fire;
- 31) install boilers for heating bitumen and resins closer than 20 m from combustible buildings, structures and building materials.

127. In order to extinguish fire in a timely manner, the CV fleet facilities are equipped with fire hydrants for internal fire water supply.

The distance from hydrants to the walls of buildings shall be at least 5 m. Gaps between hydrants shall not exceed 200 m. The distance of hydrants from the carriageway is not more than 2.5 m.

The wells of semi-hardened fire hydrants are closed with covers to be constantly cleared of dirt and snow.

The volume of water in the CV fleet fire ponds is calculated for 3 hours of extinguishing a fire with a water flow rate of 10 liters per second. The capacity of each pond shall be at least 50 m<sup>3</sup>.

The distance from the fire pond to the fuel tank is 40 m, to the nearest building or structure - no more than 40 m.

Fire ponds and hydrants are placed in the area so that each building (structure) is provided with water from 2 ponds or hydrants. Fire ponds' and hydrants' location is indicated by plates and signs.

128. WME parking lots are provided with dry sand in boxes with a capacity of 0.5 m<sup>3</sup> and coarse fabrics or felt blankets the size of 1 x 1 m: one box with sand for every 500 m<sup>3</sup>.

Boxes with sand shall have lids to protect the sand from moistening with precipitation. The box is supplied with a shovel or sand scoop. In summer, at least 2 barrels of water shall be there.

129. Fire tools in CV fleet areas are stored on shields painted in red. One fire shield is designed to protect an area of 400 m<sup>2</sup>.

The shields are installed in plain sight and shall have free access.

It is advisable to have in one place a fire shield, a box of sand, coarse fabrics or a felt blanket, barrels of water arranging them in the form of a fire station near each storage facility or parking lot.

Shields with fire tools in the CV fleet area shall be sealed. The inventory of the shield is fixed on it.

130. It is necessary to provide a sufficient number of roads and driveways inside the CV fleet area for quick arrival of the personnel and equipment to the place of a fire in the area.

Roads and driveways are provided with unobstructed access to buildings and sources of fire water supply and shall be looped.

Driveways are located at a distance of 5 - 8 m from the walls of buildings and structures of the CV fleet area.

131. The road transportation of the personnel is allowed in a car (in the body) in case of strengthening a quick-detachable fire extinguisher with a capacity of at least 2 (3) liters (in the bus, a fire extinguisher is located in the driver's cab).

132. When transporting ammunition, explosives, fuel and other dangerous goods, the following shall be observed:



- 1) drivers are specifically instructed on the loading and transportation of goods and FSR compliance;
- 2) vehicles shall have fire extinguishers and a red flag in the left front corner of the body, and also the “Dangerous Goods” sign;
- 3) the muffler in vehicles transporting fuel shall be carried forward under the radiator;
- 4) the inscription “Flammable” is applied on the side and rear walls of containers (doors of drawers and cabinets);
- 5) bulk transport must have devices for tanks’ grounding;
- 6) stops are not allowed in populated localities and in special danger areas;
- 7) smoking in cabs, bodies and at a distance closer than 15 m from vehicles is not allowed.

133. When preparing automotive equipment for troops operating in the forests, the vehicles shall have additional saws, axes and cables for clearing debris, as well as fire extinguishing means. Repair units are deployed closer to the battle formations of their troops, avoiding direct location on the forest edges, along roads and clearings. For a quick exit from occupied areas, it is necessary to prepare side tracks.

#### **Clause 5. Fire safety measures in military depots**

134. Fire safety of an engineer ammunition depot includes a set of measures aimed at ensuring the safe storage of ammunition in the event of an emergency at industrial and civilian facilities, natural disasters and fires near depots, and also at protecting the population, facilities and the environment from the effects of emergency situations in a depot.

135. Fire safety is achieved through:

- 1) compliance with the FSR when loading storage facilities and in case of combined storage;
- 2) observing safe distances for detonation transmission, rational mutual disposition of storage facilities on the ground and the bunding;
- 3) correct placement and stowage of ammunition in the storage facility, compliance with storage conditions;
- 4) compliance with safety measures when performing technological operations with ammunition.

**Footnote. Paragraph 135 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

136. To ensure fire safety, the following measures are taken:

- 1) safe distances, a restricted area of 400 m from the external fence of the entire area of the depot are established;
- 2) depots are classified as a restricted area;
- 3) an alert and joint action plan is worked out to deal with the consequences of fires, accidents and natural disasters in restricted zones and restricted areas;
- 4) prohibitions and restrictions placing hazardous facilities in restricted zones and restricted areas are observed.

137. Industrial waste and garbage are removed from the area daily after the works are over.

The technical area is cleaned of small shoots, bushes, branches, fallen deadwood and dry vegetation, trees are cleaned of branches to a height of 2 m. Around each building at a distance of 20 m, foliage and dry grass are completely removed, the grass around the buildings at a distance of 1 m from the walls is weeded out.

138. Access to the technical area of depots (storage facilities) is prohibited to persons with incendiary items.

It is forbidden to dry grass and burn dry grass inside depots (storage facilities).

139. Inside depots (storage facilities), it is not allowed to:

- 1) keep property not intended for the storage there;
- 2) clutter walkways and exits in depots (storage facilities);
- 3) upholster the shelves and darken the windows with paper, cardboard, a film of polymeric materials and fabrics not treated with a flame retardant.

140. Property shall be stacked so that walkways and exits are clear. It is not allowed to lay the property close to stoves, radiators, electrical wiring and lamps, and also to perform in storage facilities works not related to the transportation and laying of property.

**Footnote. Paragraph 140 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

141. It is not allowed to stack building materials, fuel supplies or any property, as well as empty containers and canning near depots (storage facilities), and to store flammable liquids in common storage facilities.

142. Fire chambers and view openings of stoves are arranged outside depots (storage facilities), and the pipes are supplied with spark arresters. 2 hours before the depot's closing, the firing of a stove shall be completely over, all the stoves shall be checked and closed.

143. When installing electric lighting, all the depots (storage facilities) are equipped with external circuit breakers. Outdoor circuit breakers and group shields with fuses are placed in metal boxes. Lamps in depots (storage facilities) shall be

closed (with glass caps) and located along the main and viewing walkways. It is not allowed to install electrical outlets and arrange offices inside storage facilities.

144. After the work is over, the entire electrical network in storage facilities, except for security equipment is turned off by an external switch.

145. Water reserve is created in the technical area of the depot for firefighting purposes. Water consumption for external fire extinguishing of buildings and structures located in the technical area and the sorting platform shall be at least 10 liters per second, provided that water is supplied from fire ponds (tanks), hydrants. The number of fire ponds and their location shall observe the condition of ensuring the fire extinguishing of each building (structure) from at least two fire ponds with a capacity of at least 50 m<sup>3</sup> each.

For the firefighting purposes, in the technical area of a depot and sorting platform (including storage areas of ammunition of B, D hazard categories), water reserve is created in a fire pond that shall be at least 100 m<sup>3</sup> for one building or structure designed for three hours of extinguishing one fire with water consumption of at least 10 liters per second.

146. Fire reservoirs shall be located no further than 50 m from the nearest point of the protected building or structure along a paved road.

**Footnote. Paragraph 146 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

147. A fire protection team is called to any point in the depot by an audible alarm and telephone. The working order of the alarm is checked daily.

148. During a thunderstorm, in order to detect and eliminate fires in a timely manner, the personnel monitor the storage facilities and workshops. The fire protection team is put on alert, the watch is carried out by mobile posts and from the towers.

149. Diesel locomotives and tractor equipment are allowed into the technical area after being checked by a fire unit and provided they have a spark arrester, fire extinguisher and a large piece of felt.

**Footnote. Paragraph 149 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

150. In order to organize the fight against forest fires before the onset of the fire hazard period (dry summers, forest fires in neighboring districts, etc.), by order of the depot head, a duty subunit (team) is set up to eliminate and extinguish forest fires and prevent fire penetration in the depot area.

The subunit is provided with necessary road-digging equipment, fire extinguishing agents are prepared.

151. Restricted areas (if any) are prepared for firefighting (fire belts and protective strips are arranged, water reserves are created and access roads to them are made, forests are thinned out, etc.).

152. The organization and methods of fire extinguishing, depending on the personnel and equipment involved, the availability of ammunition, and the characteristics of their burning, are set out in fire protection plans. Alongside, it is necessary to consider:

- 1) the probability of ammunition's deflagration-to-explosion transfer;
- 2) the probability of explosion of ammunition in bulk;
- 3) the probability of dissemination (dispersion) of ammunition (fragments) in case of explosion, fire;
- 4) the spread of sources of fire (explosion) with dispersed ammunition;
- 5) the possibility of mining the area adjacent to the storage facility with cluster (fully loaded) ammunition and the presence of self-destructor mechanisms therein.

The fire engine house is located in the administrative area at a distance of not less than 70 m from the outer wire fence of the security perimeter of the technical area and closer to the entrance to the technical area. The location of the fire engine house in the administrative area is chosen so as to ensure the time of arrival at the buildings and structures of the technical area being no more than 10 minutes.

153. Pumping stations for supplying drinking and household, and industrial water, as well as water for fire-fighting purposes, shall have a separate dispenser for each purpose.

154. The bases shall have a fire water supply system, which is combined with drinking or industrial water supply system.

The inviolability of the fire water reserve is ensured by the construction of a water intake device of household pumps and the presence of two first-stage ponds, one of which contains an emergency supply of water.

155. When storing a fire water reserve in a tank, the latter shall be equipped so as to ensure the inviolability of the supply at normal times and the ability to quickly turn on in the event of a fire.

156. The water supply network of the bases is equipped with:

- 1) fire hydrants installed along roads and driveways at a distance of not more than 2.5 m from them, and from the walls of the storage facilities - not closer than 5 m from the walls of the storage facilities so that each structure is provided with two hydrants, while the distance between hydrants within the building is no more than 200 m;

- 2) valves on the network that are fixed so that when one of the network sections is turned off for repair, the water supply to the buildings, where the interruptions in water supply are not allowed (canteen, bathhouse, boiler room), does not stop wholly, so that no more than one water stand is out of operation.

In the sections of the base area without water lines to extinguish the fire, it is necessary to arrange fire ponds with a capacity of 50 m<sup>3</sup> each for outdoor firefighting.

In the technical area of the base, fire ponds are required regardless of the availability of a water supply network.

Fire ponds with a capacity of 50 m<sup>3</sup> are equipped with at least two fillers for water intake from the fire engine installation site. The site shall have the size ensuring the installation of fire engines, and the clearing of the carriageway.

Fire ponds are filled from fire hydrants installed no further than 40 m from the ponds. In case of no water supply network, fire ponds are filled with water from delivered tanks.

**Footnote. Paragraph 156 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

157. A device for putting a fire water supply network into a building is allowed when installing no more than five fire hydrants on the network.

158. A stationary military fuel depot is located in the territory of a military unit (institution) at a fire-proof distance from buildings and structures with account of the possibility to use existing access roads and railways.

**Footnote. Paragraph 158 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

159. A stationary military fuel depot is located:

1) in a dispersed disposition of structures, shelters, equipment and fuel reserves in accordance with the FSR;

2) ensuring the placement of a depot in an area with a grade elevation below the existing facilities of the unit, on the leeward side in relation to them and nearby populated localities;

3) near highways with convenient access roads;

4) near natural water reservoirs or other reliable sources of water supply for firefighting and operational needs of the depot;

5) in storage facilities for oils, greases, special liquids in containers and technical equipment;

6) on platforms or sheds for storing fuel in containers and used barrels;

7) on platforms or sheds for parking bulk and high-sided vehicles.

**Footnote. Paragraph 159 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of**

Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

160. The fuel depot of the aviation base is located at the aerodrome and is dispersed in 2-3 or more sections located in the territory of the aerodrome outside the approach lanes, at distances allowing for quick supply of fuel to the dispersion zones of the aviation units, but with the necessary fire breaks. A base depot is deployed at one of the sections, and fuel consumables - at others.

#### **Clause 6. Fire safety measures at arsenals, bases and depots of missiles and ammunition**

161. In the area of arsenals, bases and depots, it is necessary to arrange:

1) a technical area for the storage, assembly, repair, routine, loading and unloading and transportation operations with missiles and ammunition;

2) a sorting platform for the acceptance and temporary storage of spent cartridges coming from the troops, canning and missiles and ammunition to be sorted;

3) security perimeters of the technical area and the sorting platform;

4) a helipad for sending (accepting) missiles and ammunition;

5) an administrative area for the deployment of the headquarters, barracks, woodworking shops, boiler rooms, the building of the fire protection team, pumping stations, material depots, a garage and other buildings and structures of auxiliary services;

6) a housing town for residential houses, dormitories, medical and children's institutions, schools, clubs, stadiums, canteens, shops and bath-laundry plants.

162. Ammunition storage facilities shall have a fire crew stand.

At all storage facilities (depots), workshops and work sites, fire crews are assigned from civilian personnel (employees) and workers for the time of operations.

The fire crew stands are displayed in prominent places. Before starting work, the fire crew is instructed; their knowledge of fire protection responsibilities and actions in the event of a fire is checked.

163. A complex of buildings is located in the technical area for the storage, assembly, repair, routine, loading and unloading and transportation operations with missiles and ammunition, and also firefighting equipment.

The development of roads is determined by the master plan, based on a planned cargo turnover of the base, ensuring the passage of fire engines and driveways to buildings.

164. Fuel and lubricant depots, transport and cargo department, material and fuel depots are located in the administrative area observing the fire breaks.

165. In the technical area, the grass shall be mowed in a timely manner, before it dries, and removed from the technical area. It is not allowed to dry grass, store hay and graze cattle in the technical area.

166. Buildings and premises of arsenals, bases and depots, in which explosive and fire hazardous military property is stored or operated, are classified in accordance with the RIE:

- 1) highly explosive - corresponding to B-1RIE class;
- 2) explosive - corresponding to B-1 a and B-1 b RIE classes;
- 3) fire hazardous - corresponding to P-1 and P-2 RIE classes;
- 4) non-hazardous - meeting general RIE requirements.

167. The fire and explosion hazard of buildings and premises of bases depends on the nature of production, the presence of explosives, gunpowder, pyrotechnic compositions, rocket fuels, various combustible materials and flammable liquids, the damage to which, as a result of an explosion or fire, can lead to significant material losses.

168. Highly explosive buildings and premises include those for:

- 1) the manufacture of elements from charcoal and smokeless corned powders;
- 2) the preparation of pyrotechnic compositions and the manufacture of elements from them;
- 3) the drilling of explosives and rocket propellants;
- 4) mixing gunpowder;
- 5) viewing powders in bulk;
- 6) preparing charges from corned powders;
- 7) weighting charcoal powders;
- 8) preparing and weighting charges of artillery rounds;
- 9) filing shells with charges of corned powders;
- 10) repairing charges of artillery rounds in bags;
- 11) preparing explosive charges and additional detonators;
- 12) uncorking and corking charcoal and smokeless corned powders, and products from them, enclosed in shells of fabrics;
- 13) storage facilities with charcoal powders and products from them.

169. Explosive premises include rooms for operations with shells, shots and explosive ammunition items, checking electric explosive circuits mounted in explosives (hereinafter referred to as EXs) and gunpowder, preparing, inspecting, checking and heating pyrotechnic units, igniters and explosive devices of missiles and ammunition enclosed in hard shells, except for rooms where these operations are carried out in armored cameras, armored bunkers, armored cartridges, storage facilities, platforms and sheds, with EXs, smokeless powders and mixed solid fuel enclosed in a metal shell or standard canning, with ammunition, warheads and missiles with mated (inserted) warheads.

170. Fire hazardous buildings and premises include:



1) workshops for routine operations with missiles of all types and classes, for testing missiles with and without mated (inserted) warheads, preparing and mating warheads to missiles, assembling missiles and rocket engines after they are loaded;

2) storage facilities, platforms and sheds with missiles without warheads, instruments, components and spare parts for missiles equipped with rocket engines in standard canning, as well as storage facilities with ground equipment for missile systems;

3) loading and unloading points for missiles and components;

4) rooms for preparing, inspecting, checking and heating pyrotechnic units, igniters and explosive devices of missiles and ammunition when these operations are carried out in armored bunkers, armored chambers, armored cassettes.

**Footnote. Paragraph 170 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

171. In the workshops, workshop property rooms are arranged to store tools and fixtures. It is also allowed to store transitional stock of non-flammable materials in the amount necessary for the workshop operations in these property rooms for a short time.

Long-term storage of non-fire hazardous materials, as well as storage of fire hazardous materials in property rooms located in the premises of workshops, is not allowed. Such storage is organized in outgoing property rooms for storing a stock of materials maximum for three-shift needs.

Outgoing property rooms of the workshops are built using non-combustible materials away from the workshop at a distance of 40 m, if necessary, they can be heated with a central heating network and have electric lighting.

**Footnote. Paragraph 171 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

172. Boxes with ammunition are stacked in vehicles, trailers, on a railway platform so that the top row of boxes is on the level of the side edge or above it not more than half the box.

In case of incomplete use of the carrying capacity of vehicles, it is allowed to increase the sides of vehicles so that the structures and devices of these sides ensure the safety of ammunition and exclude the falling of boxes during transportation. Ammunition vehicles are equipped with a spark arrester and fire extinguishing means.

173. By order of a military unit commander, a person shall be assigned to be in charge of each storage facility for compliance with the FSR requirements in the storage facility and adjacent area.

After works are over, the storage facilities are checked by representatives of the fire protection team, then the doors of a storage facility are closed and sealed by the person in charge.

Footnote. Paragraph 173 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

174. Storage sites shall have lightning protection and fire equipment. It is necessary to clear a strip of land 20 m wide around each site, grass around the site at a distance of 1 m is weeded out.

175. It is not allowed to carry out any work with explosive elements in storage facilities and at sites, except for the import (export) of property, laying for storage and minor repair of storage facilities, provided that the following requirements are met:

- 1) a work manager is appointed for carrying out operations;
- 2) workers are obliged to observe fire safety measures;
- 3) when repairing the roof of the storage facility without a ceiling, it is necessary to pull a tarpaulin or mesh over explosive elements to prevent accidental falling of various items, tools on the elements;
- 4) when repairing floors, explosive elements shall be removed and temporarily placed next to the storage facility or in a free area.

Footnote. Paragraph 175 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

176. It is not allowed to make open fire in the technical, administrative areas of the base, and also in a residential town.

Open fire in the technical area of the base is allowed in exceptional cases and only with the permission of the base head supported by a relevant order. Operations shall be carried out in the presence of a fire crew of the base and necessary fire extinguishing equipment, which shall be combat-ready.

177. Daily after the end of the working day, the work manager and a fire crew representative check all workplaces and premises and correct the defects discovered, disconnect the workshop (work site, storage facility) from the power supply line, close and seal the premises.

178. Fire safety instructions of the head of the fire protection team are mandatory for the entire base personnel.

179. Firefighting measures taken at the base prevent the possibility of a fire occurrence. The personnel of the fire protection team of the base are in constant readiness for quick fire suppression.

180. To organize the fight against steppe fires before the summer season, by order of the base head, a task group is set up to extinguish steppe fires and prevent the penetration of fire into the base. The task group is given the necessary automotive, earthmoving equipment and personnel. To fight against steppe fires, the necessary supply of primary firefighting equipment (shovels, axes, flappers) is prepared in advance.

In the event of a steppe fire within a radius of 5 km, the base head reports this to the superior chief indicating the nature of the fire, its area, direction of spread and measures taken to extinguish it. Round-the-clock patrols are arranged or fire stations are set up in order to timely detect and eliminate emerging fires.

Additional emergency fire teams are formed at the base, they shall be provided with fire extinguishing means paid for with local funds.

181. After the works are over, electric trucks and electric cars (with battery power) shall be kept in specially equipped rooms.

182. The fire protection team is called to any point of the base area by an audible alarm and in parallel by telephone.

Firefighting equipment shall be in prominent places and painted red.

The base personnel shall be trained in the procedure for signaling alarms and handling primary firefighting means.

183. Explosive and fire-hazardous premises shall be equipped with a fire automatics system in accordance with the legislation on architectural, urban planning and construction activities in the Republic of Kazakhstan.

**Footnote. Paragraph 183 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

184. To eliminate fire sources in the initial stage, fire shields with fire tools are installed in workshops, storage facilities, at work sites and other structures and buildings of the base, additionally to fire equipment in workshops, storage facilities and at work sites with missiles and ammunition, there shall be (for each shield):

- 1) water barrels - 2 pieces;
- 2) a box with sand - 1 piece;
- 3) a ladder - 1 piece.

Fire tools are put on shields. Shields are installed at a distance of 10 - 15 m of each facility.

**Footnote. Paragraph 184 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

185. On the technical territory of the base, for firefighting, a supply of water shall be created at the rate of at least 50 m<sup>3</sup> for every 100 wagons of ammunition, stored in reservoirs with a capacity of 50 m<sup>3</sup>. Reservoirs shall be built at a distance of no more than 50 m from storage facilities (workshops), sites and stockpiles of ammunition to ensure simultaneous water supply to each facility from two or more reservoirs. Reservoirs shall be equipped with entrances, providing access for fire trucks at any time of the year. Fire trucks near the reservoir shall be located so as not to block the road for the passage of vehicles.

Footnote. Paragraph 185 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

186. A route map for fire engines at the base is developed so that fire engines can arrive at the farthest storage facility no later than 10 minutes after the receipt of a fire alarm.

Footnote. Paragraph 186 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

187. Motor and tractor equipment is let in the technical area of the base after it is checked by a fire unit. It is necessary for every car or tractor operating in the technical area to have fire extinguishers, coarse fabric and a properly operating fuel system, exhaust device (silencer) and spark arrester.

It is not allowed to load ammunition and missiles onto vehicles without fire extinguishing means.

Footnote. Paragraph 187 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

188. Daily, a day-duty guard is assigned from the fire protection team that has firefighting means, vehicles and equipment according to the list.

During a thunderstorm, in order to detect and eliminate a fire in a timely manner, the base personnel watch storage facilities and workshops. The entire personnel of the fire protection team are put on alert, a mobile post is sent to the technical area in a fire truck and tower watch is carried out.

189. Smoking is not allowed in the technical area of the base. Smoking in the administrative area is allowed only in specially designated and equipped places.

Footnote. Paragraph 189 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of

Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

#### **Clause 7. Fire safety measures in missile and artillery depots**

Footnote. The title of paragraph 7 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

190. The personnel participating in operations with ammunition, before starting work in a depot, are instructed on safety and fire safety measures.

191. Inspections (checks) are carried out in the presence of persons to whom models of missile and artillery weapons are assigned.

In the course of inspection (check), the storage of missile and artillery weapons is checked (including storage conditions, the state of storage facilities, lightning protection, fire extinguishing means and alarm systems).

192. When maintained, fire extinguishers are checked and, if necessary, charged.

193. A current inspection is carried out in order to check the availability of weapons (property) and to control the correct storage, specifically:

- 1) the presence of weapons and property without opening the canning and breaking seals;
- 2) the state of self-indicating silica gel;
- 3) condition of fire extinguishing means.

194. Storage facilities shall have fire protection means and lightning protection.

195. The weapons are stored at storage sites in sets, in batches, taking into account the convenience of maintenance and evacuation, and fire safety measures.

196. Distances between places of ammunition storage shall be: not less than 50 m – for banded ones, not less than 100 m – for not banded ones.

Storage sites may be loaded with no more than 150 tons of ammunition and missiles (by the presence of explosives), but not exceed 15 cars at one storage site. The amount of explosives is determined by summing the mass of explosive charges and military pyrotechnic elements in shells, mines, warheads and half the total mass of powder charges.

Footnote. Paragraph 196 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

197. If ammunition of several units of one garrison (formation) is placed in a common area, by order of the head of the garrison (commander of a formation), the chief of the joint depot of the formation is appointed as the person responsible for

compliance with fire safety measures in the entire territory of the depot, in case of his absence, this duty is assigned to the senior in rank head of the missile and artillery service of a military unit, the ammunition of which is located in this territory.

198. Features of storage of missiles and ammunition in camps, at loading and unloading points. The platform accommodates no more than 3 ammunition cars. The distance between stacks may be 5-10 m, and between platforms - at least 100 m. Stacks are placed no closer than 25 m from the railway line.

On the platform (under a shed, in a pit), the ammunition is laid on bottom plates, wooden blocks (concrete blocks) at least 18 cm high, reliably sheltered from exposure to sunlight. The platforms are equipped with fire extinguishing means.

199. Storage facilities for vehicles are divided into sections by fire walls of 1.5 bricks. In each section, it is allowed to place 10 - 15 vehicle units. The doors and gates of storage facilities are locked only outside.

200. In all cases of placing CVs and vehicles on open platforms, it is necessary to ensure their unhindered (without maneuvering) escape in the event of a fire.

201. A vehicle is equipped with:

- 1) a fire extinguisher fixed outside the cab;
- 2) coarse fabric (felt blanket (1 x 1 m));
- 3) a red flag on the port side;
- 4) soft tow rope or rigid tow.

202. In the territory of parks, the distance from the storage sites with combat vehicles and ammunition-loaded vehicles to the depots of fuels and lubricants, the parking lots for fuel tanks, gas stations, open fire sources and boiler rooms is at least 300 m. The distance between storage sites shall be no less than 50 m. For fire protection purposes, all storage sites for CVs and ammunition-loaded vehicles are equipped with lightning protection, and when storing missiles, rocket ammunition and RPG rockets, they shall be banded. Mobility equipment loaded with ammunition is grounded.

203. The following missiles and ammunition are considered dangerous to handle:

- 1) fully loaded ammunition dropped from a height of more than 1 m;
- 2) missiles without containers, dropped from any height, and in containers - from a height of more than 0.5 m;
- 3) with shock marks on shells, mines, warheads of rockets or on nose fuze bodies;
- 4) with fuzes having torn or dented membranes;
- 5) filled and fuzed ammunition, shells, mines, missiles subjected to explosion effect, fire, bombing or shelling, as well as those after air, car and rail accidents.

204. When storing and transporting missiles and ammunition, it is not allowed to:

- 1) transport fuel and lubricants in bodies of cars and trailers together with missiles and ammunition;



- 2) use open fire sources to facilitate engine starting;
- 3) smoke and make bonfires closer than 40 m from vehicles;
- 4) fuel by pouring fuel from the tanks of one car into the tanks of the other;
- 5) stop cars in populated localities;
- 6) use defective cars and cars without fire extinguishing means.

205. CVs and vehicles loaded with missiles and ammunition are fuelled (refueled) in compliance with the following safety measures:

- 1) the fueling machine shall be no closer than 2 m from the fuel-filling column (refuel tanker);
- 2) the next car shall be no closer than 10 m from the one being fuelled;
- 3) in case of fueling a lot of vehicles, it is necessary to arrange a fire station with fire extinguishing means;
- 4) vehicles shall be fuelled with stopped engines;
- 5) if fuel was poured on a vehicle, the latter shall be towed away from the fueling point.

**Footnote.** Paragraph 205 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

#### **Clause 8. Fire safety measures in engineer ammunition depots**

**Footnote.** The title of paragraph 8 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

206. According to the explosion hazard classification, engineer ammunition belongs to the first class of dangerous goods and is divided into 4 hazard subclasses.

The 1st hazard subclass includes ammunition with mass explosion hazard. Mass explosion is an explosion that simultaneously affects an entire stack or storage facility with ammunition.

The 2nd hazard subclass includes ammunition not exploding in mass. This subclass includes ammunition that does not explode in mass, but which, when exploded, poses danger because of disseminating, mining the terrain and causing substantial damage to surrounding objects.

The 3rd hazard subclass includes fire hazardous ammunition, not exploding in mass. This subclass includes ammunition that generates a large amount of heat during combustion or that catches fire one after another with a slight effect of exploding or disseminating, or both.



The 4th hazard subclass includes ammunition not posing a significant danger. This subclass includes ammunition that poses a slight explosion hazard only in the event of ignition or initiation. The effect of explosion is limited to the package so that the external source of initiation does not cause an instant explosion of the contents of the package.

Footnote. Paragraph 206 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

207. The workshop for the repair and assembly of ammunition has an explosion hazard category - hazardous in relation to fire and explosion, highly hazardous in terms of dissemination and spread of fire seats over long distances with possible explosions.

Buildings and structures (storage facilities) and premises without ammunition or with ammunition not containing explosives, powders, pyrotechnic compositions and products made of them are divided into fire-and-explosion hazard categories in accordance with Order No. 439 of the Minister of Internal Affairs of the Republic of Kazakhstan as of June 23, 2017 “On approval of the technical regulation “General fire safety requirements” registered in the State Registration Register of Regulatory Legal Acts of the Republic of Kazakhstan under No. 15501 on August 17, 2017.

208. Firefighting equipment, and also technical means of communication and signaling, are located in the technical area of the depot.

209. Roads are paved and must provide free access to the fire pond at any time of the year.

210. The technical area of depots, depending on the degree of fire-and-explosion hazard of the stored ammunition, is divided by hazard categories into a production zone and zones (sites) of ammunition storage.

The storage facilities inside the zones are grouped depending on the design features of the ammunition placed in them so that the consequences of emergency situations (fires, explosions, mining, dispersion of fire sources and detonation) are contained to the extent possible.

Buildings and structures (storage facilities) in the technical area are located so that the hazard category of these buildings (structures) decreases as they approach the administrative area and the residential town. At the same time, buildings and structures (storage facilities) with a hazard category shall be placed at a distance of at least 1 km from the housing town and town for the deployment of military units.

It is allowed to place buildings and structures with a lower hazard category in areas with buildings and structures with a higher hazard category.

Footnote. Paragraph 210 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of

Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

211. A fire engine house, a training camp with a training tower, a 100-meter obstacle course are located in the administrative area.

212. Depots of gasoline, lubricants, fuel and other materiel are located in the administrative area in compliance with fire breaks.

Footnote. Paragraph 212 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

213. The CP (checkpoint) of a technical area shall have:

- 1) an instruction on fire safety measures to the CP controller;
- 2) instructions to the CP controller on the procedure for the admission of personnel and equipment in the technical area in the event of a fire;
- 3) tags of storage facilities and open storage areas for a fire crew.

214. On days of work in the depot, before opening (closing) it, the head of the depot (storage facility) checks the condition of lighting, doors, alarms, fire extinguishing means and the compliance with fire safety measures, the integrity of walls, windows, gratings and ceiling. If any defects are discovered, the head of the depot (storage facility) reports to the command thereon and takes measures to correct them.

215. The CP of the technical area shall have a box for storing smoking accessories, fire tags, and also instructions on fire safety, taking and putting facilities under protection.

216. The economic activity of the depot includes the implementation of preparatory measures provided for by the fire protection plan of the depot.

217. It is not allowed to place depots in the territories:

- 1) flooded as a result of natural and man-made disasters;
- 2) exposed to snow avalanches, landslides, mudflows, shifting sand and sand dunes ;
- 3) with underground workings or minerals;
- 4) having radioactive contamination of the soil;
- 5) classified, in accordance with the legislation, as the first belt of the sanitary protection zone of resorts and water sources;
- 6) of long-distance transport (railway junctions, sea and river ports, airports);
- 7) in the sanitary protection zones of sanitary facilities and municipal facilities ( treatment facilities, landfills);
- 8) archaeological and other reserves, in their protection areas;
- 9) of cultural monuments;

- 10) with seismic activity of more than 8 points;
- 11) located closer than 1 km from landfills and animal burial sites;
- 12) closer than 500 m from cemeteries;
- 13) in contact with peat deposits.

It is advisable to choose areas for depots with account of the use of earthmoving machines for digging shelters.

Temporary field depots must be located in dry, fire-prone areas.

218. To ensure the protection of the population, buildings and structures, and environmental protection in the event of natural and man-made emergencies at storage facilities, in restricted areas and restricted districts at storage facilities, storage facilities shall develop and approve alert plans and joint actions with territorial divisions the authorized body in the field of civil protection in the aftermath of fires, accidents and natural disasters in restricted areas and restricted districts and the evacuation of people and property.

The practical development of the plan shall be carried out by storage facilities and territorial divisions of the authorized body in the field of civil protection at least once a year in the period from March to June.

**Footnote. Paragraph 218 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

219. Within the restricted zone, it is not allowed to live, to construct buildings, roads, structures and other facilities, to carry out works other than logging, reforestation, land reclamation and activities related to fire prevention measures.

220. Fire reservoirs with a capacity of at least 50 m<sup>3</sup> shall be equipped on the technical territory. Fire reservoirs shall be located no further than 50 m from the nearest point of the protected building or structure.

**Footnote. Paragraph 220 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

221. In accordance with the requirements for lightning protection of buildings and structures, contact of tree branches with walls and roofs of storage facilities is not allowed.

222. At open storage sites, ammunition and components are covered with tarpaulins, which reliably protect them from direct sunlight. Open sites are arranged with account of the requirements for the protection against weapons of mass destruction, fire and explosion safety, lightning protection and ensuring the convenience of accepting and issuing ammunition.

223. At the end of the working day, work sites are put in order, packaging and materials are removed, electricity is turned off, production waste is removed from the technical area.

After the departure of workers, work sites and their adjacent territory are inspected by the work manager together with a representative of the fire unit. Inspection results are recorded in the fire situation check log.

224. Depots are supplied with water from the city (district) water supply system or from local surface or underground sources.

It is allowed to arrange independent household-drinking and industrial water supply system. In this case, one of them shall be combined with the fire water supply system.

225. The external water supply network is equipped with:

- 1) fire hydrants installed so that each building is provided with two hydrants;
- 2) hydrants installed no more than 2.5 m from roads (driveways) and at least 5 m from the walls of buildings;
- 3) hydrants, with a distance between them of no more than 200 m;
- 4) by-pass lines providing shutdown of individual sections for repair without interrupting the supply of water to consumers;
- 5) shut-off and control equipment installed in such a way that shutting down any of the network sections does not cut the water supply to storage facilities and office buildings (fire engine house, canteen, bathhouse, boiler room).

226. There shall be at least 2 entrances for fire networks to the building. Networks with no more than five fire hydrants can have one entrance. Fire hydrants are located in wall niches or cabinets. Each fire hydrant has a 20-m-long fire hose of the same diameter.

If there are five or more fire hydrants, the fire risers at the foundation are equipped with a flap or valve, and also a drain cock for emptying.

227. The heat supply of storage facilities, maintenance points (repair shops) and test laboratories requiring compliance with the temperature regime is provided by a water heating system with automatic adjustment of the heat carrier supply to the heating devices.

228. The fire protection team shall have telephone communication with all the buildings and structures of the depot and direct communication with the depot duty officer.

It is allowed to connect several subscriber units to one trunk in parallel.

229. The equipment for receiving signals from technical security equipment is installed in the guardhouse, in the guard commander's room or in a separate control room designed for this purpose.

To ensure continuous operation of technical security equipment and fire alarms, an autonomous power source is installed.

All connecting lines of the fire alarm system are laid using an underground cable.

230. The storage of ammunition in sets is organized within the storage departments. Specialization of the storage departments and the distribution of ammunition between them are carried out so as to ensure the uniform loading of the depot as a whole.

The opening and visiting of storage facilities is permitted only in the presence of the head (manager) of the storage facility (depot) in charge of them (except for the cases of opening storage facilities in the event of a fire and natural disasters).

231. Rocket ammunition, engines, pyrotechnic signals, signal mines are stored in reinforced concrete or brick storage facilities with reinforced concrete floors, banded, equipped with lightning protection and firefighting means.

232. Diesel and gasoline locomotives burning liquid fuel are allowed into the depot if accompanied by a representative of the fire unit.

233. A vehicle designed for the transportation of ammunition is equipped with:

- 1) three fire extinguishers;
- 2) waterproof fabric which catches fire difficultly;
- 3) a metal grounding chain with ground contact at a length of 200 mm and a metal pin to protect against static and atmospheric charges at a parking lot.

**Footnote. Paragraph 233 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

234. The test laboratory is equipped with telephone communications and fire extinguishing means.

235. Workplaces and equipment in the repair workshop (maintenance point) shall be arranged so as to ensure free exit from the workshop in the event of a fire.

All rooms of the repair shop (maintenance point) are equipped with fire extinguishing means.

236. The head (commander) giving a task for ammunition operations takes into account the danger of the work to do, the qualifications and experience of the performers. For critical operations, it is necessary to assign more experienced personnel.

Persons from the technical engineer personnel who have experience and know the technological process are appointed as work managers.

Before starting work, the appointed manager assigns a fire crew and checks the availability of fire extinguishing means.

In the course of operations, it is necessary to create conditions excluding shocks to or drops of ammunition. There shall be fire equipment and alarms in the place of ammunition works.

237. The crossing of roads and railways by loading and unloading means from live rolls or conveyors is not allowed.

238. Rooms for operations using volatile solvents (gasoline, white spirit) are equipped with forced ventilation and fire extinguishing means.

239. In order to avoid a fire from spontaneous ignition of a pyrotechnic composition in the rooms, it is not allowed to:

1) accumulate, during the work, a stock of models more than required to meet the needs of one shift;

2) leave, after the end of work, open samples of pyrotechnic compositions. Samples are put in serviceable desiccators.

#### **Clause 9. Fire safety measures taken to store small arms and ammunition**

**Footnote. The title of paragraph 9 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

240. Maintenance of storage facilities and firefighting activities are carried out in accordance with the ISR requirements.

The entire territory of the MAD depots is divided into sections assigned by order of the military unit commander to the officers of the MAD service, who are responsible for fire safety and the maintenance of order. The head of the depot (storage facility) is assigned responsibility for a strip of land 50 m wide around the depot (storage facility).

At a distance of 20 m from the storage facilities, moss, fallen leaves and needles of trees are completely removed, and the grass at a distance of 2 m from the walls is weeded out, the trees are cleaned of branches to a height of 2.5 m. In spring and summer, the grass in the territory of the depot is mowed and removed from the territory on time (before becoming dry). It is not allowed to dry grass, burn fallen leaves, branches, deadwood in the depot territory. A strip 5–6 m wide is plowed along the outer perimeter of the territory. Roads and driveways to storage facilities, as well as to sources of fire water supply, are in good condition, and in winter, they must be cleared of snow.

241. A MAD depot shall have fire extinguishing means. At the depot entrance, there is a central fire station with 10 pieces of each unit of fire equipment.

A fire shield, a sandbox with a capacity of 0.5 m<sup>3</sup>, barrels of water with a capacity of at least 0.2 m<sup>3</sup> each (the number of barrels depends on the size of the facilities, but not less than two) are installed at each storage site at a distance of 10 - 15 m. In case of a decrease in temperature to - 0 ° C, water shall be poured out of the barrels, and the latter shall be turned upside down.

242. Fire shields are completed with the following fire extinguishing means:



1) a metal staircase at least 4 m long - 1 piece;

2) a fire blanket the size of 1 x 1 m - 1 piece.

Firefighting equipment shall be in good condition.

243. The weapons storage room shall have two fire extinguishers.

244. When placing vehicles with ammunition in storage facilities, the following safety measures are taken:

1) the distance between the sideboards of the vehicles and the wall of the storage facility shall allow for free carrying out of boxes with ammunition and be at least 0.8 m ;

2) the distance between the tail boards of the vehicles and the wall of the storage facility shall allow for free opening of the tail board and be at least 1 m;

3) the distance between vehicles along the front shall be at least 1.5 m;

4) vehicles in storage facilities are positioned in 1 - 2 rows or as trains: a tractor truck and a trailer towed by it, to ensure their unhindered (without maneuvering) departure in the event of a fire. Two-row positioning is allowed for departures in opposite directions.

**Footnote. Paragraph 244 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

245. When trailers are placed together with a tractor truck, they are coupled. When keeping ammunition on trailers without tractor trucks (or in the absence of the possibility of coupling), the trailers are provided with long cables or rigid tows to withdraw them in the event of a fire.

246. Each vehicle loaded with ammunition is equipped with:

1) a fire extinguisher mounted outside the cab;

2) coarse fabric (felt blanket) (1 x 1 m);

3) soft tow rope or rigid tow;

4) a spark arrester on a silencer;

5) an explosive sign.

247. Storage facilities with vehicles loaded with ammunition are divided into sections by fire walls 1.5 brick thick. It is not allowed to put more than 10 vehicle units in each section.

248. Daily, the head of the depot (storage facility) conducts an external inspection of the depot (storage facility) on the days of depot operations. In the course of inspection, he checks the condition of lighting, locks, doors, fire extinguishing equipment and compliance with fire safety measures, the integrity of walls, windows, gratings, roofs, excluding possible penetration attempts. When opening, it is necessary to additionally check the condition of the TSE and ceiling. If defects are discovered,



the head of the depot (storage facility) reports thereon to the guard commander and the head of the MAD service (storage department). With the permission of the head of the MAD service (storage department), he takes corrective action. The inspection results are indicated in the book of the daily inspection of the depot (storage facility).

249. It is not allowed to enter the MAD depots with smoking and incendiary accessories. For smoking, a special place is allocated outside the territory of the MAD depot, where a smoking area is arranged with a water tank for cigarette butts and used matches.

#### **Clause 10. Fire safety measures in fuel and lubricant depots**

**Footnote. The title of paragraph 10 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

250. To prevent leakage of fuel in the depot in the event of a fire or a tank accident, groups of ground and semi-hardened tanks, as well as individual tanks, are banded with an earth rampart. The capacity of the banded area shall be not less than half the capacity of the ground part of all tanks of the group, and the surface of the spilled fuel shall be 0.2 m below the upper edge of the earth rampart. The distance from the wall of the ground tank to the foot of the earth rampart is at least 2 m.

251. It is not allowed to lay fuel pipelines in common trenches together with gas pipelines, fire water supply, heat pipes, as well as with high and low voltage cables.

Pipelines for petroleum products requiring heating during pumping can be laid together with steam pipelines and condensate pipelines in fireproof crawlways.

The minimum laying depth of the pipelines shall be at least 0.8 m to the top of the pipe and 0.6 m above the top of the duct, when they are laid in the channels.

252. Each storage facility designed to store fuel and special liquids in containers shall have:

- 1) an instruction for the personnel on the rules for storing fuel in containers and technical equipment, storage conditions, fire safety, indicating the procedure for action in the event of a fire approved by the commander of the military unit;
- 2) metal boxes for cleaning cloth;
- 3) fire equipment.

**Footnote. Paragraph 252 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

253. A car entering the territory of the depot is checked for the presence of fire extinguishing means and grounding devices.

254. When preparing the depot for work in the spring-summer conditions, the following measures are taken:

- 1) checking the condition and maintenance of fire tools, equipment and charges of fire extinguishers;
- 2) inspection of lightning protection devices and grounding to discharge static electricity;
- 3) putting in order roads inside the depot and access roads;
- 4) clearing the territory of the depot from debris (dry grass, leaves).

255. When preparing the depot for work in the autumn-winter conditions, the following measures are taken:

- 1) preparation of the necessary tools for clearing roads from snow;
- 2) inspection and insulation of water supply system, fire ponds, hydrants, fire-cocks, water standposts and wells;
- 3) checking and preparing fire equipment and tools for winter conditions, checking the charge of fire extinguishers and their insulation, creating conditions for keeping sand dry;
- 4) clearing the territory of the depot from debris.

**Footnote. Paragraph 255 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

256. When locating a depot in the forest, a site for it is selected near the edge of the forest in order to ensure the rapid advance of the depot to a safe place in the event of a fire.

257. Tanks in pits are arranged in groups.

In case of tanks' storage in one place for a short time, they are installed in banded open pits or natural shelters.

258. Stationary filling stations include:

- 1) storage tanks for fuel and oils;
- 2) containers for storing oils and greases;
- 3) refueling units for fuel dispensing;
- 4) refueling units for oil dispensing;
- 5) refueling equipment, weighing instruments (scales, meter stock, oleometers) and boxes or cabinet for their storage;
- 6) fire extinguishing means.

259. The protection and defense of a field military fuel depot during combat operations is organized by the deputy commander of a unit (formation) responsible for the rear (logistical support) using the personnel and equipment at his disposal and includes fire protection.

260. Compliance with the FSR, as well as actions in response to fire alarms, is mandatory for all persons present in the depot.

Footnote. Paragraph 260 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

261. Measures for the fire protection of the depot are carried out in accordance with the annual plan approved by the unit commander.

262. Work sites shall have fire extinguishing means (fire extinguishers, sandboxes, water barrels, buckets, shovels). Fire protection instructions are posted at the work sites

Fire extinguishing means are placed near the tanks, storage facilities and a filling station. It is not allowed to store other property together with these means.

263. Upon completion of work before closing the depot, a fire unit shall check the territory and storage facilities.

If the depot is passed under protection at an unspecified time, officials shall notify the head of the fire unit thereof no later than 45 minutes before closing.

264. When making repairs and installation at the depot, it is allowed to carry out hot work no closer than 20 m from pumping stations, tank farms and detached tanks with petroleum products. When tanks in the tank farms are filled (emptied) with (from) petroleum products, it is allowed to perform hot works no closer than 40 m from these tanks (electric welding units are installed outside the earth rampart at least 20 m from oil tanks).

265. When performing hot works, the following safety measures are taken:

1) a fire station with the necessary fire extinguishing equipment is arranged at the work site for the entire duration of the works;

2) all the filler necks of adjacent tanks, gate valve in the pipelines are covered with asbestos covers, which are wetted with water in hot weather;

3) at sites of works using open fire, felt or asbestos shields are installed the size of 1.5 x 2 m to prevent the spread of sparks.

Fire hazardous work is approved by order of the commander of the military unit, which indicates the time of the commencement and completion of work, working conditions in fire and explosion hazardous premises.

266. The silencers of trucks intended for the carriage of fuel are brought forward, and each vehicle is provided with fire extinguishing means (fire extinguishers, coarse cloth or felt cover, sandbox, shovel).

When being filled, car engines must operate at low speeds. The specified requirement does not apply to diesel vehicles, the engines of which, after being filled,

are stopped and started up after the filling is over, at the same time the lids of tank necks and corks of barrels must be closed.

267. It is not allowed to fill car tanks with fuel, position cars with their silencers in the direction of the filling in the fuel delivery area.

268. At a filling station, vehicles take in fuel in compliance with the following requirements:

- 1) vehicles with the personnel in the body are not allowed to take in fuel;
- 2) a vehicle shall stand no closer than 2 m from the filling station;
- 3) the next vehicle shall be no closer than 5 m from the one being fuelled; the rest vehicles are positioned 1 - 2 m from one another;
- 4) when fueling a lot of vehicles, a fire station with fire extinguishing means is arranged;
- 5) the engines of vehicles taking in fuel shall be stopped;
- 6) if fuel was poured on a vehicle taking in fuel, it is not allowed to start the engine until the spilled fuel is completely removed from the surface of the vehicle; if necessary, the vehicle drenched in fuel is towed out of the filling station;
- 7) it is not allowed to repair and adjust the ignition of the engine, to test the signal;
- 8) in the absence of external lighting, filling stations can be lit by car headlights or battery lights, and also from mobile power plants installed no closer than 10 m from the refueling unit.

269. When fueling, attention must be paid to the tightness of the joints, the absence of leaks at the dispensing tap and the thoroughness of the grounding of the refueling equipment.

270. In the storage areas of fire extinguishers there shall be such signs as "Fire extinguisher". In winter, fire extinguishers are placed in insulated cabinets.

Fire equipment is placed on special shields painted red. A sandbox is placed near the shield. Sand shall always be dry and loose.

In winter, to lower the water-ice transition temperature, sodium chloride (common salt) or is added to water barrels installed in unheated rooms.

271. When using a group aircraft fueller to refuel aviation equipment, before starting refueling, the head of the centralized fueller and the head of the laboratory (laboratory assistant) check the availability and serviceability of fire extinguishing and grounding equipment.

272. The storage facilities of poisonous technical fluids shall have:

- 1) a box with dry loose sand (dry sawdust);
- 2) a square-faced shovel;
- 3) a barrel of water (in summer) and buckets;
- 4) personal protective equipment;
- 5) fire extinguishing means.

It is necessary to draw hazard symbols on the doors of storage facilities, the gates (when storing liquids at the sites).

### **Clause 11. Fire safety measures in industrial premises**

**Footnote.** The title of paragraph 11 has been amended in the Kazakh language, and the text in Russian is not changed by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

273. The premises for performing works using flammable liquids (kerosene, gasoline, acetone, nitrovarnish and others) and charging batteries are equipped with special ventilation. Electric motors, lamps, electrical distribution devices shall be explosion-proof. Charging units and generators of gas-welding units are installed in separate rooms. Stoves in these rooms are not allowed.

274. Highly flammable liquids shall be in metal well-sealed vessels in an amount necessary for one day only, at the end of the work, they shall be taken to a specially equipped storage room.

Supply tanks of industrial furnaces and liquid-fuel units with a capacity of more than 1 m<sup>3</sup> are installed in isolated rooms, and with a capacity of up to 1 m<sup>3</sup> - on fireproof walls at a distance of at least 5 m from the units.

275. Metal boxes with lids shall be in all industrial premises for collecting cleaning materials, oiled wipes and rags, which must be emptied upon completion of work.

Oiled special clothing is stored outside production facilities (workshops) in special cabinets in a hanging form. It is not allowed to leave oiled cleaning materials in pockets of special clothing.

276. Upon completion of work, all industrial waste and garbage accumulated during the day must be removed from the premises of the workshops.

277. For fire safety purposes, it is not allowed to carry out gas supply repair work by persons without special training and permission to carry out these works.

### **Clause 12. Fire safety measures at aerodromes (heliports)**

278. For each aerodrome, a route diagram is developed for the personnel of units deployed at the aerodrome and vehicles along the airfield of the aerodrome.

The diagram shows the location of the fire station.

279. Special vehicles are not allowed to leave the fleet park in case of:

- 1) fluid leakage or gas leak;
- 2) missing or faulty grounding device;
- 3) the absence or incorrect application of the inscription on special bodies, tanks, containers, cylinders;

4) absence or malfunctioning of firefighting means.

280. It is necessary to arrange sites for vehicles allocated for ground service in the airfield zone. These sites must have fire extinguishing means. At one airport, depending on the location of the aviation equipment, several sites are arranged. The sites are located at a distance of at least 15 m from buildings and structures, depending on their fire hazard class. Simultaneously with the preparation of the aerodrome for flights, the sites are thoroughly cleaned and snow and foreign objects are removed.

281. A fire (airfield) truck of a fire station is located near the command and control station, technical assistance equipment (cranes, tractor trucks) placed at the disposal of the senior flight engineer are near the control center of the engineering and aviation service at designated sites.

282. Motor vehicles allocated for the transport of dangerous goods are equipped with fire extinguishers and a red flag mounted on the front left side of the body.

283. When operating transportable (mobile) oxygen and gas producing stations, it is required to monitor the serviceability and operability of:

1) automatic safety interlock of power and compressor units intended to prevent their emergency condition;

2) automatic safety outage intended to ensure the protection of operating personnel from electric shock;

3) warning light (light alarm) intended for communication between the station personnel operating power and technological equipment;

4) safety devices intended to protect equipment from operation at high pressure;

5) fire extinguishing means;

6) emergency lighting and alarm;

7) turbo-expander.

284. Stationary gasification plants are located:

1) in closed ventilated rooms meeting fire safety requirements - stationary gasification plants;

2) in car bodies - mobile liquefied gas generators. Gas from the plants shall be discharged in a safe place.

285. Depots for storing oxygen and combustible gas cylinders are provided with fire extinguishing means and are located at a distance of at least 20 m from each other and from industrial buildings, at least 150 m from residential buildings and at least 200 m from public premises.

In depots, instructions, rules and posters on safety and handling of cylinders available in the depot are posted in designated places.

It is not allowed to store any combustible materials and perform works requiring the use of open fire closer than 25 m from the depot with cylinders.

286. When using heaters for heating aircraft cabins and personnel locations, it is required to monitor:

- 1) the availability and serviceability of fire extinguishing means and a grounding device;
- 2) the quality and grade of fuel used for the heating installation;
- 3) serviceability and operability of safety devices, protective equipment and alarm.

287. When operating air launch installations, it is required to monitor the serviceability and operability of:

- 1) tachosignal and protective equipment;
- 2) emergency operation signals;
- 3) electrical batteries;
- 4) fire extinguishing systems.

288. Stationary battery-charging stations are located in the premises that meet the following requirements:

1) they shall have separate rooms for the acceptance and inspection of batteries, plant room, rooms for charging and discharging batteries, storage of batteries and spare batteries and parts, preparation of electrolyte, storage of electrolyte, components and special liquids, distillation room if a distillation unit is available, preventive repair of batteries;

2) they shall have lighting, be clean, dry and well ventilated (the use of forced-air and exhaust ventilation is mandatory in the charging room);

3) the floors are covered with rubber mats;

4) electrical fittings are explosion-proof, and wiring is hidden;

5) glass in the windows is ground or painted over with white paint;

6) there is central heating (or a stove with external firebox);

7) there are equipped fire stations. The air temperature in the room is in the range from + 12 ° C to + 25 ° C.

289. It is not allowed to store oxygen in the same room with fuel and lubricants.

In the event of a fire, it shall be extinguished using carbon dioxide fire extinguishers or sand.

290. Before starting the power plants of electric-gas equipment, it is necessary to check the serviceability of the fire extinguishing means available in vehicles and ensure the firefighting readiness of the launch site. When refueling, it is not allowed to spill fuel, oil and working fluid and the contact of these liquids with wires and units of electrical systems (if spilt, remove them with rags). It is not allowed to store rags soaked with flammable liquids on electro-gas equipment.

It is not allowed to use water to extinguish electric-gas equipment on fire.

291. An analysis of failures in the operation of electric-gas equipment that caused a fire, death of personnel or other grave consequences is carried out personally by the



commander of the aviation unit. The occurrence of such failures is reported immediately up the line.

### **Clause 13. Fire safety measures on ships**

292. In order to prevent fires on ships, it is not allowed to:

- 1) install unspecified fuzes in the electrical circuits;
- 2) leave the power using equipment switched on, when leaving offices and residential premises (cabins);
- 3) keep wiping material (oakum, rags) moist or saturated with flammable and combustible liquids and other agents;
- 4) store fuel, lubricants, flammable and combustible liquids in open containers, as well as freshly painted canvas folded and in poorly ventilated rooms;
- 5) store paints and varnishes on boats;
- 6) put isolating gas masks closer than 1 m from oxygen cylinders, warheads and torpedo compartments, cable routes, fuel pipelines and tanks, in places with increased heat generation (above + 50 ° C) and possible leaks or accumulations of flammable and combustible liquids, as well as water and steam;
- 7) leave sockets, junction and distribution boxes open, lights without caps and protective nets.

It is not allowed to keep flammable or combustible materials in rooms with a high temperature, wooden support bars are allowed there only in case of emergency.

293. When performing welding and open fire works on the ship (in the room where the work is performed and in adjacent rooms), a fire station is arranged there. The workplace is enclosed with asbestos sheets or other non-combustible items, a guard (watch) shall be near it, fire extinguishing means are made ready, and the room where the work is done is ventilated.

At the end of welding and open fire works, it is necessary to clean and inspect the premises (places) in which the work was carried out, and also those adjacent to them. After completion of work, the places shall be checked regularly during 3-5 hours.

294. When anchored (buoyed, moored) at ports and harbors, garbage is taken out in special barges or to the dockside and stored in designated places observing fire safety measures. Shields with a set of fire extinguishing means are arranged at the pierside berth of the ship.

295. On the high seas, garbage is burned in special stoves (furnaces) or collected in containers with lids.

296. On ships, it is not allowed to imitate explosions and fires with making a fire.

The ship crews are trained to extinguish real fires at the training grounds and in simulation facilities.

297. Piers, mooring walls and the water area of the coastal base are kept in good order and in a condition that ensures fire safety, which requires:

1) their regular cleaning of garbage (especially flammable one), and ,in addition, the water area shall be cleared of petroleum products;

2) to collect garbage only in specially designated barges, or in boxes installed in places away from berth walls and piers;

3) to keep access roads to piers and coastal facilities of the coastal base open, and fire extinguishing means - in good condition;

4) the allocation of special areas with butt bins for smoking.

It is not allowed to clutter quaysides and piers with cargo, to make fire on them without observing the necessary fire safety measures.

298. The maintenance of access roads, firefighting equipment and equipment for smoking areas is the responsibility of the commander of the coastal base and the deputy commander of the rear formation.

299. Ships shall have a complete set of serviceable fire extinguishing equipment and emergency-rescue equipment, and also the required number of individual and collective lifesaving equipment.

Emergency-rescue equipment and firefighting equipment are used only for their intended purpose.

300. Open fire can be used for various kinds of work on the ship only with the permission of the engineer officer.

A guard (watch) with fire extinguishing means shall be near open fire.

301. It is not allowed to use open fire as a means of lighting:

1) in magazines and rooms with missiles, torpedoes and ammunition;

2) in compartments, tanks, trunks and containers;

3) in the hangars of aircraft;

4) in the rooms with batteries;

5) in storage facilities for all types of fuel;

6) in paint stores and deck stores;

7) in storage facilities for oakum and food;

8) in rooms difficult to ventilates, and also in freshly painted rooms;

9) near the trunks of ship, special ventilation and ventilation closures.

302. If the temperature rises above + 30 ° C, it is necessary to take all measures to cool the air in the magazines and identify the reasons for its increase.

303. In magazines with missiles and ammunition, it is not allowed to:

1) be for persons bearing firearms, ammunition, explosives, matches and ignition devices;

2) install the wrong wiring;

3) use portable electric lamps, power tools, electric fans and heating pads.

When loading and unloading missiles, torpedoes and ammunition (from a depot, pier, special barges, walls), the ship is prepared to immediately get underway; watchmen shall be at the steering wheel, the capstan, on the gangway, at the main engines, at the flooding (sprinkling) valves and at the moorings (both on the ship and on the wall); emergency response teams (groups) are brought to combat readiness, the remaining units are on alert indicated by the ship's commander.

If loading (unloading) is performed from vehicles, in the event of an accident, they shall be ensured immediate diversion (departure) from the shipboard.

304. When loading (unloading) missiles, torpedoes and ammunition in most fire hazardous places, there shall be foremen or sailors - guards (watchmen) with good knowledge of the rules for handling missiles, torpedoes and ammunition and specially trained in firefighting and explosion preventive measures.

305. When loading and unloading missiles, torpedoes and ammunition, it is necessary to take measures to prevent them from falling and hitting metal items.

306. In the event of emergency situations with missiles at launching installations, in containers or trunks posing a threat of explosion, it is necessary to make an emergency launch (discharge) of the rocket in a direction that is safe for other ships or objects.

307. When a ship is docked, missiles, torpedoes, ammunition and explosives are delivered to coastal depots, except for those each time specified by a special instruction from the commander of the formation.

308. When the combat readiness is removed, the guns are discharged and the ammunition is removed. Mines placed on the upper deck, regardless of their condition, shall be guarded (watched).

309. Tanks with flammable and combustible liquids in the magazines must be ventilated, especially when the temperature rises there. All openings (necks) and pipelines are closed and flammable and combustible liquids shall not leak out of them. When opening fuel tanks and disassembling pipelines, open fire is not permitted.

The temperature of flammable and combustible liquids in the magazine shall be no more than + 50 ° C for heavy (dark) varieties and + 25 ° C for light ones.

310. On ships, flammable and combustible liquids are kept in specially equipped tanks or in standard containers on the upper deck in places specified by the ship's order away from any sources of fire and well ventilated.

Spilled flammable and combustible liquids are immediately removed with oakum or rags, and the room is ventilated. The use of flammable and combustible liquids and other flammable materials for wiping decks, bulkheads and furniture is not allowed.

311. Accumulation of water and combustible materials is not permitted in holds. Flammable and combustible liquids entering the holds shall be immediately removed.

#### **Clause 14. Fire safety measures at shooting ranges**

312. In the places of accommodation of the personnel, in barracks, buildings and industrial premises of the shooting range, fire events are organized in accordance with the requirements of Appendix 18 to the Charter of the internal service of the Armed Forces, other troops and military units of the Republic of Kazakhstan.

313. To prevent fires at a shooting range it is not allowed to:

1) place ammunition, explosive and combustible substances behind a hand-held grenade launcher or infantry anti-tank rocket launcher and flamethrower in the 90° sector and closer than 30 m;

2) shoot using tracer bullets and shells in hot and dry weather;

3) shoot from an infantry rocket flamethrower in an open firing position in the presence of obstacles behind a shooter closer than 3 meters and next to him - closer than 1 meter;

4) shoot from an infantry rocket flamethrower from enclosed spaces less than 45 m<sup>3</sup>, in the presence of obstacles behind a shooter closer than 6 meters and next to him - closer than 1 meter;

5) smoke in recesses, pits and shelters with ammunition, near explosive and flammable substances and materials, on cars carrying ammunition, explosives, fuel and lubricants and combustible materials;

6) place tanks, CVs, armored personnel carriers, tractors and vehicles near explosive and fuel storage facilities;

7) perform any blasting operations, as well as ignition of non-toxic and toxic smoke bombs in places with dried vegetation and fire blank artillery shots near flammable substances and materials;

8) burn the remaining gunpowder at firing positions.

314. An area around the target fields shall be plowed from the steppe vegetation, forests and forest plantations.

315. The terrain for the range facilities (targets, distribution wells, electric drives, railway flyovers, target shields) and routes for laying cable lines are cleared of dried grass.

316. The personnel of the landfills shall comply with the requirements of the Fire Safety Rules during the operation of electrical installations.

Maintenance work on electrical installations with an operating voltage of up to 1000 volts shall be carried out by landfill officials who have a permit to work with electrical installations. These shall include assistant to the head of the range - engineer for electrical special equipment, commander of the platoon for providing the range, chiefs and senior electricians - operators of the training facilities of the range.

**Footnote. Paragraph 316 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

317. The commander of the military unit, by his order, appoints an official responsible for organizing the operation of all electrical facilities of the shooting range.

318. The range personnel occupying positions that require a permit to operate electrical installations shall be instructed annually (which is recorded in the instruction log) and tested for knowledge of the FSR requirements for operating electrical installations in order to obtain a permit.

Footnote. Paragraph 318 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

319. It is necessary to follow the RIE when carrying out the assembly, adjustment, repair of electrical installations and tests.

320. The personnel operating electrical installations, having discovered a violation of the FSR requirements or a malfunction in them, which is dangerous for the personnel or fraught with an accident, fire or explosion, take corrective action and report to the range head on malfunctions and action taken.

Footnote. Paragraph 320 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

321. In the event of a fire and upon receipt of the cordon's signal about the danger to continue firing, it is necessary to give a general ceasefire signal.

Shooting is resumed with the permission of the exercise (shooting) commander after eliminating the danger and reporting this to the range (training facility) officer.

#### **Clause 15. Fire safety measures when performing fire hazardous works**

322. The procedure for carrying out fire hazardous work is announced by order of the unit commander (head of the institution), which provides for permanent and temporary points, the start and end time of work, special working conditions in fire and explosion hazardous areas, the issuance of a written permit, monitoring the implementation of all fire safety requirements when preparing for, conducting operations and upon their completion.

323. Officials responsible for the fire-fighting condition of the facility where fire hazardous work was carried out shall periodically check the work sites within 3-5 hours after they are completed.

Footnote. Paragraph 323 - as amended by the order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).

## **Clause 16. Fire safety measures against lightning and static electricity**

324. Buildings, structures and open storage areas are equipped with lightning protection devices.

To install lightning protection, the following basic initial data are indicated:

- 1) the name and location of the facility;
- 2) operational and construction characteristics of the protected structures;
- 3) information on the presence of metal structures, trees and other tall objects near the protected buildings and structures (within 10-15 m), as well as on all entrances to these structures (pipelines, cables, communication wires, fire alarms, etc.).

325. In accordance with the FSR requirements, it is necessary to develop a lightning protection project for the CV fleet buildings and structures.

Lightning protection projects for existing CV fleet buildings and structures, as well as for those under construction using own resources, are developed by the personnel of military units with the involvement of specialists from local design organizations, if necessary.

Lightning protection projects for newly constructed CV fleet buildings and structures are developed by district maintenance units.

**Footnote. Paragraph 325 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).**

326. A design organization, on the basis of the design assignment, substantiates the lightning protection volume, calculates the design of lightning rods, and also identifies the need for protection against static electricity and determines the design of devices to protect against its effects.

327. With regard to lightning protection, the CV fleet buildings and structures are divided into categories I, II and III.

328. The category I lightning protection in the CV fleet area includes:

- 1) buildings and structures inside vapors, gases or dust of flammable substances can create explosive mixtures with air, which can explode because of an electric spark (gas stations, paintwork areas);
- 2) storage facilities for weapons and military equipment with missiles;
- 3) buildings and structures with valuable equipment, the failure of which during fires and mechanical damage to the enclosing structures due to the flow of high pulse currents is unacceptable, or buildings and structures with leaking enclosed apparatus and equipment with combustible liquids, the flash point of which in a closed cup tester is 61° C and lower or the temperature of the liquid itself is above 250° C;

4) storage facilities, platforms, sites, points for loading and unloading the parts of missiles;

5) storage facilities for calcium carbide, filling stations.

329. The category II lightning protection in a base maintenance park includes:

1) buildings and structures for special purposes, in which explosives and flammable materials are kept in metal canning;

2) rooms with equipment with liquids, the flash point of which is above 61° C or the temperature of the product (liquid) itself is below 250° C;

3) storage facilities for weapons and military equipment with loaded ammunition and valuable equipment;

4) storage facilities for missiles;

5) oxygen stations;

6) industrial premises for servicing military equipment, missiles and their ground equipment.

330. The category III lightning protection in a base maintenance park includes:

1) buildings and structures for special purposes;

2) areas for the repair of artillery-missile weapons and weapon locating radars;

3) storage facilities and sites for artillery-missile weapons and weapon locating radars;

4) storage facilities for valuable military-technical equipment and military equipment;

5) observation towers with overhead power lighting lines, communication and signaling lines;

6) approaches of overhead lines of low and high current to buildings and structures of all lightning protection categories.

331. The CV fleet buildings and structures belonging to category I lightning protection are protected from direct lightning strikes with detached lightning rods or earth wires.

In order to exclude external high voltage in underground metal communications, it is necessary to place grounding conductors and their conductor wires at a distance of more than 5 m from the protected structures.

Arc-shaped banded and semi-hardened storage facilities and structures are protected with detached lightning rods or earth wires. The protection zone of lightning rods covers entrances to storage facilities, ventilation pipes and other metal structures, and elements that rise above the ground or enter storage facilities from the outside.

For banded and semi-hardened storage facilities where lightning rods or earth wires cannot be used, lightning protection is allowed by means of a metal mesh laid under a layer of soil 0.005 - 0.1 m thick.



332. The CV fleet buildings and structures belonging to category I lightning protection are protected from electrostatic induction by connecting metal cases of all equipment and devices, as well as all metal structures, to a special ground electrode and protective grounding of electrical equipment.

To protect against external high voltage in underground utilities and structures, it is necessary, when entering the protected structure, to connect them to earthing switches of protection against electrical induction or protective grounding of electrical equipment.

Electric networks, alarm networks, as well as other wires, are put into buildings and structures only using cables.

333. The CV fleet buildings and structures belonging to category II lightning protection are protected from direct lightning strikes with detached uninsulated lightning rods or earth wires or those installed on buildings and structures, and also using an air terminal fixed to the metal roof or using the roof itself as a lightning rod for buildings or structures.

When installing earth wires from each lightning rod or each rack on the protected building or structure, it is necessary to lay at least two conductor wires.

Distances from detached lightning rods to protected buildings and structures belonging to category II lightning protection, as well as underground utilities, are not standardized.

With regard to buildings and structures belonging to category II lightning protection, it is allowed to couple protective earthing switches against direct lightning strikes and electrostatic induction, as well as protective grounding of electrical equipment.

External metal installations containing explosive gases, vapors, flammable liquids are protected from direct lightning strikes by detached lightning rods.

334. The CV fleet buildings and structures belonging to category II lightning protection are protected from electrostatic induction by attaching the metal enclosures of all equipment and devices, structures and installations to the protective grounding of electrical equipment, and in its absence - to a special ground electrode, the resistance to current spreading, industrial frequency of which does not exceed 10 ohms.

Protection against electromagnetic induction is carried out using bonding strips, which are arranged every 20-30 m between pipelines and other long metal structures located at a distance of 0.1 m from each other or closer.

To protect against external high voltage, it is necessary to connect external ground metal communications and structures at the entrance to the protected building or structure and at the supports nearest to them to the ground electrode with a pulse resistance of not more than 10 ohms. It is allowed to use grounding protection against direct lightning strikes for this purpose.

335. Buildings and structures of a base maintenance park belonging to category III lightning protection are protected from direct lightning strikes with detached lightning rods or earth wires or those installed on buildings and structures, and also using an air terminal fixed to the metal roof or using the roof itself as a lightning rod. The air terminal's cells may not be larger than 150 m<sup>2</sup> (12.0 x 12.0 m).

336. Non-metal vertical pipes of buildings and structures (boiler rooms, fire and observation towers) higher than 15 m shall be protected from direct lightning strikes by lightning rods installed on them.

On pipes shorter than 50 m, it is enough to install one air terminal at least 1 m high and lay one conductor wire.

Pipes longer than 50 m shall have at least two conductor wires.

With regard to metal pipes, towers and watch towers, it is not required to install air terminals and lay conductor wires.

The impulse resistance of grounding conductors for metal and non-metal pipes, towers, watch towers, etc. shall not exceed 50 ohms.

337. To protect against external high voltage on external ground metal structures and communications of the CV fleet buildings and structures, it is necessary to connect these structures to the grounding conductor with impulse resistance less than 20 ohms at the entrance to the protected building or structure or to the ground electrode with impulse resistance of less than 20 ohms on the external ground metal structures and communication closest to the structure.

338. A plate is fixed on each lightning rod indicating its serial number, year of installation and a warning inscription about the danger of being near the lightning rod during a thunderstorm.

339. Lightning rods for each building and structure, facility have individual numbers (starting from the first number) that are put in the upper left corner of the stencil in the form of a double number, where the first number indicates the number of the building or structure of a facility according to the master plan, and the second one (with a hyphen) – the serial number of a lightning rod. The year of installation of the lightning rod is indicated in the upper right corner.

Conventional signs are displayed in a conspicuous place on the walls of the protected buildings and structures of the facilities (at open storage sites - on the first lightning conductor of each facility), or there shall be posters with these signs showing the mutual disposition of the foundations of buildings and structures, grounding conductors and conductor wires of lightning protection devices.

340. Lightning protection devices of the CV fleet facilities shall be in good condition and serviceable. Responsibility for the preservation and maintenance of a lightning protection device in a technically sound state during operation in a military unit lies with the commander of the military unit and his deputy for rear services (LS).

By order of the head of the district maintenance unit, direct responsibility for the operation of lightning rods and their good condition lies with the person in charge of the electrical complex.

*Footnote. Paragraph 340 has been amended in the Kazakh language, and the text in Russian is not changed by order of the Minister of Defense of the Republic of Kazakhstan dated March 31, 2021 No. 180 (shall come into effect ten calendar days after the day of its first official publication).*

341. To ensure the unfailing reliability of lightning protection devices, every year before the start of the thunderstorm season, all lightning protection devices are inspected and checked.

342. Measurements to determine the value of the resistance of lightning protection devices of the CV fleet buildings and structures are taken before or during the thunderstorm season when weather is dry and the earth's surface is dry.

343. During the inspection and check of lightning protection devices:

- 1) the integrity of lightning rods and conductor wires, the reliability of their connection and attachment to the masts are checked visually;
- 2) elements of lightning protection devices that require replacement or repair due to their mechanical integrity loss are identified;
- 3) the level of destruction of individual elements of lightning protection devices by corrosion is determined;
- 4) measures for corrosion protection and reinforcement of elements damaged by corrosion are taken;
- 5) the reliability of electrical connections between the live parts of all elements of lightning protection devices is checked;
- 6) the compliance of lightning protection devices with the purpose of the building or structure is checked and in case of construction and technological changes over the previous period, measures for the modernization and reconstruction of lightning protection are outlined;
- 7) the resistance values of all grounding conductors of lightning protection devices are measured.

The resistance of the grounding conductors of lightning protection devices and the soil resistivity are measured using resistance meters in accordance with the passport of each device.

The necessary documentation for lightning protection devices, posters with the number of the lightning rod, the year of its installation and a warning inscription about the danger of being near the lightning rod during a thunderstorm, stencils on the mutual disposition of the foundations of buildings and structures, grounding conductors and conductor wires of lightning protection devices are checked.

344. All grounding conductors, conductor wires and their connection points are subject to regular control through their opening once every 5 years, and 20% of their total number is checked annually. A plan for opening lightning protection grounding conductors is developed in the district maintenance unit, approved by the head of the district maintenance unit.

345. If the cross-section area of grounding conductors and conductor wires affected by corrosion is reduced by more than 25%, they are replaced with new ones.

346. Extraordinary inspections of lightning protection devices shall be carried out after natural disasters (hurricane wind, earthquake, fire, flood) and extreme thunderstorms.

The inspection results are documented in acts, recorded in passports and logbooks of the condition of lightning protection devices. Based on these data, a plan shall be developed to repair and correct defects of lightning protection devices discovered during inspections and checks.

347. It is not allowed to perform any type of works on and near lightning protection devices during thunderstorms.

348. At the sections of (automobile and railway) roads and pedestrian walkways closer than 15 m from lightning rods and their grounding conductors, it is necessary to arrange posters with warning signs about a danger for people to stay in these places during thunderstorms and bypass paths.

349. The unit head issues passports for lightning protection devices in operation.

350. It is necessary to take such mandatory measures of protection against static electricity in rooms (zones), where spark discharge is unacceptable, as follows:

1) to make the flooring and worktops of electrically conductive materials with volumetric resistivity not exceeding 106 ohms;

2) to install grounded metal handrails at workplaces so that a person can discharge himself of static electricity touching them from time to time.

Appendix 1  
to the Instruction for fire safety  
measures in the Armed Forces of  
the Republic of Kazakhstan  
Form

## **Fire unit statement**

from "\_\_\_" hours "\_\_\_" \_\_\_\_\_ 20 \_\_\_  
till "\_\_\_" hours "\_\_\_" \_\_\_\_\_ 20 \_\_\_

### **1. The personnel**

**The unit head** \_\_\_\_\_

**(military rank, surname and initials, if any)**

**Duty-guard at the fire engine house (or shift orderlies)** \_\_\_\_\_

—  
—  
(military rank, surname and initials, if any)

## 2. Combat crew personnel

Number as per the combat crew's table	In combat crew		In reserve	
	military rank, surname, name and patronymic (if any)	Car, tracked fire engine, motor pump	military rank, surname, name and patronymic (if any)	Car, tracked fire engine, motor pump
Crew head				
Number one				
Number two				
Number three				
Number four				
Driver				
Driver-mechanic				

## 3. Fire trucks' state

Item №	Name of the car, tracked fire engine, motor pump and the number	Technical condition of the car, tracked fire engine, motor pump	Fuel amount, l	Signature of the driver (driver-mechanic)
1				
2				
3				
4				
5				
6				
7				
8				

## 4. Fire stations

Item №	Sentries' surnames	Time of duty on station (hours) and place	Remarks on the station duty
1			
2			

## 5. Condition of water supply sources, fire extinguishing installations, fire alarms and roads

Inspection time	Defects discovered	Note about corrective action indicating the time

## 6. The unit's log

\_\_\_\_\_



Item №	List of operations	1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	Responsible manager
	1. Organizational and preventive activities					
	Special training of the team's personnel					
1.						
2.						
	Fire check					
4.						
	2. Fatigue duty					
7.						

Head of the fire protection team of  
the military unit (institution) \_\_\_\_\_

(military rank (if any), surname and initials)

"\_\_" \_\_\_\_\_ 20\_\_

Appendix 3  
to the Instruction for fire safety  
measures in the Armed Forces  
of the Republic of Kazakhstan  
Form

### LOG of fire prevention activities of the fire protection team

(team number or name of the military unit (institution))

Item №	Date	Facilities of a subunit	Activities proposed	Deadline	Inspector's signature	Status	Signature of the executive officer
1	2	3	4	5	6	7	8

Appendix 4  
to the Instruction for fire safety  
measures in the Armed Forces of  
the Republic of Kazakhstan  
Form

### Log of inspections of fire situation in the facilities before their closing by a duty unit of the full-time fire protection team (fire crew, emergency firefighting team) № \_\_

Inspection date	Inspection time	Name of the storage facility, workroom, workshop, garage	Defects discovered	Inspector's signature	Mark on corrections	Signature of the person in charge of the facility

Note: the Instruction approved by the commander of the military unit on the procedure for inspecting workshops, storage facilities, depots (garages), hangars and other fire-hazardous objects before their closing is sewn into the log.



Appendix 5  
to the Instruction for fire safety  
measures in the Armed Forces of  
the Republic of Kazakhstan  
Form

**Register of fire protection briefings of the personnel of the military unit (institution) \_\_\_\_\_**

Item №	Date of briefing	Name of a subunit	Briefing content	Number of attendees	Signature of the instructor	Signature of the subunit commander	Note
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Appendix 6 to the Instruction  
for fire safety measures in the  
Armed Forces of the  
Republic of Kazakhstan  
Form

**Personnel table of a combat crew of fire trucks, tracked fire engines and motor pumps**

Combat crew's number	When assuming duty	Order of actions	
		in case of a fire alarm	when extinguishing fire (deploying)

Head of the fire protection team of the military unit (institution) \_\_\_\_\_

(military rank (if any), signature, name initial, surname)

Note: the table is posted in premises (at the site) with fire equipment.

Appendix 7  
to the Instruction for fire safety  
measures in the Armed Forces  
of the Republic of Kazakhstan

**Special training exercises for fire protection and rescue teams of the Armed Forces of the Republic of Kazakhstan**

№	Exercises	Marks, sec.			Exercise conditions
		excellent	good	satisfactory	
					1. Combat uniform and equipment are folded using the first and second methods on benches or special shelves. An ax belt lies under the clothes. In winter, a fire hat (helmet) is

1	Putting on combat uniform and equipment (without getting into the car): by a firefighter: 1) in summer 2) in winter: by the squad: 3) in summer 4) in winter	18 22 25 30	22 26 30 35	26 30 35 40	<p>placed conveniently, a cotton quilted jacket is embedded in a tarpaulin jacket. Mittens are in the jacket pocket.</p> <p>2. Firefighters are one meter away from the combat uniform and equipment (facing them), in service uniforms, without headgear.</p> <p>3. Start: given command.</p> <p>4. Finish: the combat uniform and equipment are on, the jacket is buttoned up, the belt is fastened and tucked under the buckle, the helmet's chin strap is pulled up.</p>
2	Putting on a firefighting suit: 1) in summer 2) in winter:	70 74	75 79	80 84	<p>1. A firefighting suit is removed from a bag and is laid on a bench in any convenient way.</p> <p>2. A firefighter in combat uniform and equipment (with a belt on) is s one meter away from the firefighting suit (facing it)</p> <p>3. Start: given command.</p> <p>4. Finish: semi-overalls with shoe covers are on and fixed with shoulder straps. The fire</p>

					<p>belt is over the semi-overall and fastened.</p> <p>A jacket of metallized fabric is on and buttoned up, a helmet-mask is fastened to the jacket, mittens are on hands.</p> <p>Note: the helmet-mask is fastened to the jacket only in front, the mittens are not fastened with fastening straps</p>
3	<p>Muster and alarm response with boarding outside the garage door: of the squad :</p> <p>1) in summer 30</p> <p>2) in winter 35</p> <p>on two fire trucks 35</p> <p>: 40</p> <p>3) in summer 39</p> <p>4) in winter 43</p> <p>on three or more fire engines:</p> <p>5) in summer</p> <p>6) in winter:</p>				<p>1. Combat uniform and equipment are folded as described in exercise № 1.</p> <p>2. The personnel are in the duty room and located randomly.</p> <p>3. Start: alarm. The boarding is made after combat uniform and equipment are completely on .</p> <p>4. Finish: the car is outside the garage door, the personnel of each combat crew are in the car, the doors are closed. The time is fixed at the moment of closing the last door of the car.</p>
					<p>1. The aerial ladder is installed and extended to a set height. A firefighter is near the ladder.</p>

4	<p>Climbing an aerial ladder with bowstrings extended to:</p> <p>15 m</p> <p>20 m</p> <p>25 m</p> <p>30 m</p> <p>35 m</p> <p>40 m</p> <p>45 m</p>	<p>18</p> <p>24</p> <p>31</p> <p>39</p> <p>47</p> <p>56</p> <p>66</p>	<p>20</p> <p>27</p> <p>35</p> <p>44</p> <p>53</p> <p>63</p> <p>74</p>	<p>23</p> <p>31</p> <p>40</p> <p>50</p> <p>60</p> <p>71</p> <p>82</p>	<p>2. Start: given command.</p> <p>3. Finish: the firefighter reached the set height with both legs and fastened the snap hook to a step.</p> <p>Note:</p> <p>1. When climbing to a height of 30 m or more:</p> <p>a) the ladder rests on the structure of a building;</p> <p>b) firefighters without sufficient experience perform exercises with belay.</p> <p>2. When performing the exercise in winter conditions, 1 second is added to the standard time for every 5 meters of the height.</p>
5	<p>Climbing the stationary staircase:</p> <p>1) without a fire hose to a height of:</p> <p>8 m</p> <p>12 m</p> <p>16 m</p>	<p>8</p> <p>13</p> <p>20</p> <p>8</p>	<p>10</p> <p>15</p> <p>22</p> <p>11</p>	<p>12</p> <p>17</p> <p>24</p> <p>13</p>	<p>1. A firefighter is near the staircase. When lifting the hose line, the hose with a nozzle is rolled out and thrown over the shoulder.</p> <p>2. Start: given command.</p> <p>3. Finish: the firefighter reached a set height (step) with both legs</p> <p>Note:</p> <p>1. If the stationary staircase does not reach the ground, a ladder pole is attached to it and 2 seconds are</p>

	<p>2) with a 51-mm dry hose line and a nozzle connected to it up a stationary staircase to a height of:</p> <p>4 m 8 m 12 m 16 m</p>	<p>15 24 33</p>	<p>18 27 36</p>	<p>21 30 39</p>	<p>added to the standard time.</p> <p>2. When performing the exercise in winter conditions, 2 seconds are added to the standard time for every 4 meters.</p> <p>3. When climbing with a 66-mm dry hose line, 5 seconds are added to the standard time.</p> <p>4. When rising above 16 m, 10 seconds are added to the standard time for every 4 m.</p>
6	<p>Carrying and suspending an assault ladder to the window on the 2nd floor of the training tower :</p> <p>1) in summer 2) in winter:</p>	<p>7 10</p>	<p>9 12</p>	<p>11 14</p>	<p>1. The assault ladder is on the seventh step on the start line. The start line is 32 meters 25 cm away from the foundation of the training tower. A firefighter is behind the start line.</p> <p>2. Start: given command.</p> <p>3. Finish: the assault ladder is suspended in the window of the 2nd floor of the training tower. The firefighter stands with his left foot on the first step of the ladder and holds the bowstring of the ladder with both hands.</p>
					<p>1. The assault ladder is suspended on the</p>

7	Climbing the suspended assault ladder to the 4th floor of the training tower: 1) in summer 2) in winter:	18 21	20 23	22 25	windowsill of the 2nd floor of the training tower. A firefighter is near the ladder, his left leg is on the first step, his hands hold the bowstrings of the ladder. 2. Start: given command. 3. Finish: the firefighter touched the floor of the 4th floor of the training tower with both legs.
8	Climbing the assault ladder to the 4th floor of the training tower : 1) in summer 2) in winter:	26 30	28 32	34 38	1. The seventh step of the assault ladder is on the start line. The start line is 32m 25cm away from the training tower . A firefighter is behind the start line. 2. Start: given command. 3. Finish: the firefighter touched the floor of the 4th floor of the training tower with both legs.
					1. The extending ladder is installed and its seventh step is fixed. The first number stands near the ladder with hands holding its bowstrings and the left leg on the first step. The second number stands between the wall and the ladder, presses it to the building and holds it.

9	<p>Climbing the installed extending ladder to the 3rd floor of the training tower or the roof of a 2-story building:</p> <p>1) in summer 2) in winter:</p>	7 9	9 11	11 14	<p>2. Start: given command 3. Finish: the first number touched the floor of the 3rd floor of the training tower or the roof of a 2-story building, the second number stands between the wall and the ladder.</p> <p>Note:</p> <p>1. When rising with a dry hose line and a nozzle attached to it, 5 seconds are added to the standard time. 2. When rising with a 66-mm dry hose line, 8 seconds are added to the standard time.</p>
10	<p>Removing, carrying and installing an extending ladder on the 3rd floor of the training tower:</p> <p>1) in summer 2) in winter:</p>	16 20	18 22	20 24	<p>1. An extending ladder is folded and fixed on a car located 30 m away from the training tower (the rear wheel axis is at a 30 m mark). The rear hose reel is removed.</p> <p>2. The exercise is performed by a crew of 2 people who are at the rear wheel of the car.</p> <p>3. Start: given command 4. Finish: the extending ladder is installed and its seventh step is fixed. The first number is half a step from the</p>



					ladder facing it, the second number is between the wall and the ladder. Note: When performing the exercise with a car on the URAL-5557 and ZIL-131 chassis, model 137, 2 seconds are added to the standard time.
11	Removing, carrying and installing an extending ladder and climbing it to the 3rd floor of the training tower or the roof of a 2-story building: 1) in summer 2) in winter:	24 28	29 33	32 36	1. The extending ladder is folded and fixed on a car located 30 m away from the training tower (the rear wheel axis is at a 30 m mark). The rear hose reel is removed. 2. The exercise is performed by a crew of 2 people who are at the rear wheel of the car. 3. Start: given command 4. Finish: the seventh step of the extending ladder is fixed, the first number touched the floor of the 3rd floor of the training tower or the roof of a 2-story building with both feet, the second number stands between the wall and the ladder.
					1. A firefighter in combat uniform

12	<p>Tying the rescue loop without putting it on a person being rescued:</p> <p>1) single 2) double</p>	<p>5 6</p>	<p>6 7</p>	<p>8 9</p>	<p>and equipment is in the “Attention” position.</p> <p>2. The rescue rope, wound in a ball, is in a case with a strap, worn over the shoulder of the firefighter.</p> <p>3. Start: given command.</p> <p>4. Finish: the rescue loop is tied .</p>
13	<p>Tying the rescue loop without putting it on a person being rescued:</p> <p>1) single 2) double</p>	<p>18 21</p>	<p>22 25</p>	<p>25 30</p>	<p>1. A firefighter stands one meter away from the person being rescued lying on his back.</p> <p>2. The rescue rope, wound in a ball, is in a case with a strap, worn over the shoulder of the firefighter.</p> <p>3. Start: given command.</p> <p>4. Finish: the rescue loop is put on the person being rescued. The short end of the rope is tied around the waist and fixed to the knot of the rescue loop, the long end of the rope is wound on a safety catch.</p>
14	<p>Winding a 30-meter rescue rope into a ball (in minutes)</p>	<p>5</p>	<p>6</p>	<p>7</p>	<p>1. A firefighter is in the “Attention” position one meter away from the unwound rope , one end of which is in the firefighter’s hand.</p> <p>2. Start: given command.</p> <p>3. Finish: the rope is wound in</p>

					a ball, the free end of the rope is tucked into the middle of the ball, the ball is in a case.
15	Fixing a rescue rope to the structure of a building	4	6	8	<p>1. A firefighter stands half a meter away from the place of fixing the rope. The rope, wound in a ball, is in a case with a strap worn over the shoulder.</p> <p>2. Start: given command.</p> <p>3. Finish: the knot is tightened securely, the long end of the rope is at the firefighter's feet.</p>
16	100-meter obstacle course	27	30	33	<p>1. A firefighter with a nozzle is at the start (the nozzle is in any position).</p> <p>2. Start: given command.</p> <p>3. Finish: the firefighter, having overcome all obstacles, crossed the finish line with the nozzle adjoining the hose line. The hoses are interconnected and attached to the wye.</p> <p>Note: The obstacles on the 100-meter course are arranged and the order for their overcoming is set on the basis of</p>

					the current rules for firefighting sport.
17	Laying a 40-m hose line (with a nozzle) from the stand pipe mounted on a hydrant: 1) in summer 2) in winter	15 17	17 19	19 21	1. Fire equipment is folded 1 m away from the stand pipe. A firefighter is near the equipment. 2. Start: given command. 3. Finish: 8 seconds are added to the standard time for every 20 m of the hose line
18	Laying 20 m of a hose line with "B" nozzle from an internal fire hydrant.	5	7	9	1. A firefighter is 1 m away from the internal fire hydrant. The hose attached to the hydrant is in the cabinet, the door is closed. The nozzle is attached to the hose. 2. Start: given command. 3. Finish: the hose line is laid. The firefighter is in combat position.
					1. The stand pipe is in the car box and is fixed. The box doors are closed, the suction pipe of the pumping engine is 3 m away from the hydrant, the rear hose reel is removed. The hydrant box cover is open, the riser cap is closed. A firefighter is one meter away from the box of the car body, where the stand

19	<p>Installation of a fire truck (tanker, pumping engine) on a hydrant and connection of suction hoses (one soft and one rigid) to the suction pipe of the pump:</p> <p>1) in summer 2) in winter</p>	28 30	31 33	34 36	<p>pipe is located, facing it.</p> <p>2. The exercise is performed by a crew of 2 people (driver and firefighter).</p> <p>3. Start: given command.</p> <p>4. Finish: the stand pipe is tightly screwed onto the hydrant riser, the suction hoses are connected to the suction pipe of the pump and the stand pipe. The driver or firefighter performing the driver's duties is at the pump, the firefighter is at the stand pipe.</p> <p>Note:</p> <p>1. When performing an exercise with water launch, 15 seconds are added to the standard time and the time is fixed at the moment the water appears from the pump delivery section.</p> <p>2. When performing exercises on the Leningrad hydrant, 3 seconds are added to the standard time.</p> <p>3. If the cap of the hydrant riser is screwed, 3 seconds are added to the standard time.</p>
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20	<p>Installation of a fire truck (pumping engine, tanker) at a pond with the connection of 2 suction hoses (4 m each) and mesh :</p> <p>1) in summer 2) in winter</p>	75 (45) 80 (50)	80 (50) 85 (55)	90 (60) 95 (65)	<p>1. The truck is installed at an open pond, the engine runs at low speed. Fire equipment is fixed as required. The rear hose reel is removed and put aside.</p> <p>2. The exercise is performed by a crew of 2 numbers (driver and firefighter) standing opposite the rear wheel axis</p> <p>3. Start: given command.</p> <p>4. Finish: the engine is switched to the pump, the time is fixed at the moment the water appears from the pump delivery section.</p> <p>Note:</p> <p>1. The time in brackets is indicated for an exercise without water intake.</p> <p>2. When performing the exercise from fire trucks with suction pipes located in front, 10 seconds are added to the standard time.</p>
					<p>1. The truck is installed at an open pond, the engine runs at low speed. Fire equipment is fixed as required.</p>

21	<p>Installation of a fire truck (tanker, pumping engine) at a pond with the connection of 4 (2 m-long) suction hoses and mesh:</p> <p>1) in summer 2) in winter</p>	110 115	115 120	125 130	<p>The rear hose reel is removed and put aside.</p> <p>2. The exercise is performed by a crew of 2 numbers (driver and fireman) standing opposite the rear wheel axis.</p> <p>3. Start: given command.</p> <p>4. Finish: the engine is switched to the pump, the time is fixed at the moment the water appears from the pump discharge outlet.</p>
22	<p>Installation of a motor-pump: MP-600 or MP-800 at a water source with water supply</p>	35	40	50	<p>1. Motor pump is installed near a pond. Suction hose and mesh are located at the motor pump. The engine pump is off.</p> <p>2. The exercise is performed by a crew of 2 numbers (firefighter and engine operator) standing at the motor pump.</p> <p>3. Start: given command.</p> <p>4. Finish: the moment the water appears from the pump delivery section.</p> <p>Note: It is not permitted to supply water without a suction screen.</p>
					<p>1. The motor pump is installed near a pond.</p>

23	Installation of the MP-1200 motor pump (MP-1400, MP-1600) at a water source with the connection of two suction hoses (4 m each) with a mesh and water supply	80	85	95	<p>Suction hoses with mesh are fixed as required. The engine pump is off.</p> <p>2. The exercise is performed by a crew of 2 numbers (firefighter and engine operator) standing opposite the wheel axis.</p> <p>3. Start: given command.</p> <p>4. Finish: the moment the water appears from the pump delivery section.</p>
24	<p>Squad deployment:</p> <p>1) on a tanker with nozzles' (one "A" and one "B") delivery through the wye with operating lines of two hoses</p>	70 85	75 90	80 95	<p>1. The truck is installed at the hydrant. All fire equipment is fixed. The box doors are closed. The engine runs at low speed</p> <p>2. The squad line up on either side of the truck.</p> <p>3. Start: given command.</p> <p>4. Finish: the truck is installed on a hydrant, the engine is switched to the pump, the pump is filled with water (only in summer), the hose lines are laid , connected, the nozzle operators are at the position ready to operate the nozzles.</p> <p>Note:</p> <p>1. In case of combat deployment with the launch of</p>



	<p>each and the supply line of:</p> <p>3 hoses</p> <p>4 hoses</p> <p>5 hoses</p> <p>6 hoses</p>	<p>100</p> <p>115</p>	<p>105</p> <p>120</p>	<p>110</p> <p>125</p>	<p>water, 5 seconds are added to the standard time for each hose. Time is fixed at the moment a jet appears from the last nozzle.</p> <p>2. When nozzles are delivered to a height using straight, fixed ladders and flight stairs, 10 seconds are added to the standard time for each story.</p> <p>3. When performing the exercise in winter conditions, 5 seconds are added to the standard time.</p> <p>4. When performing the exercise from trucks having suction pipes in front, 10 seconds are added to the standard time.</p>
					<p>1. The truck is installed at an open pond. All fire equipment is fixed. The engine runs at low speed. The box doors are closed.</p> <p>2. The squad line up on either side of the car.</p> <p>3. Start: given command.</p> <p>4. Finish: the truck is installed at the water source, the engine is switched to the pump, the pump is filled with water from the</p>

	<p>2) with installation of the monitor: as part of a squad tanker at:</p> <p>60 m 80 m as part of the pumping engine squad at: 100 m 120 m 140 m</p>	<p>60 85 115 145 175</p>	<p>65 90 125 155 195</p>	<p>70 100 135 165 210</p>	<p>water source, two 66-mm hose lines are laid towards the nozzle, nozzle operators are at the position ready for work.</p> <p>Note:</p> <ol style="list-style-type: none"> <li>1. When laying two 77-mm supply lines, 5 seconds are added to the standard time.</li> <li>2. When performing the exercise with water launch, 5 seconds are added to the standard time for each hose of one of the lines and time is fixed at the time of water appearance.</li> <li>3. When performing the exercise on trucks with front suction sections, 10 seconds are added to the standard time.</li> <li>4. When installing the truck at a pond with the connection of 4 (2 m) suction hoses and mesh, 35 seconds are added to the standard time.</li> <li>5. When performing the exercise in winter conditions, 5 seconds are added to the standard time.</li> </ol> <p>1. The truck engine is running.</p>

	<p>3) on a tanker with the delivery of one GVP-600 to:</p> <p>2 hoses: 19</p> <p>3.1) in summer 21</p> <p>3.2) in winter 22</p> <p>3 hoses: 24</p> <p>3.3) in summer 24</p> <p>3.4) in winter 24</p>		<p>22</p> <p>24</p> <p>25</p> <p>27</p>	<p>25</p> <p>27</p> <p>28</p> <p>30</p>	<p>Fire equipment is fixed as required.</p> <p>2. The exercise is performed by a crew of 2 numbers (driver and firefighter) standing against the rear wheel axis, with their backs to the vehicle.</p> <p>3. Start: given command.</p> <p>4. Finish: the engine is switched to the pump, a hose line is laid. The firefighter is at the nozzle position, the driver is at the pump.</p> <p>Note:</p> <p>When performing the exercise with foam supply, 7 seconds are added to the standard time for each hose and time is fixed at the moment of foam appearance from a nozzle.</p>
					<p>1. The truck engine is running. The accordion hoses are in boxes and fixed.</p> <p>2. The exercise is performed by a crew of 2 numbers (driver and firefighter) standing at the rear wheel of the truck.</p> <p>3. Start: given command.</p> <p>4. Finish: the engine is</p>

	4) on a tanker with the delivery of one “B” nozzle to:				switched to the pump, a hose line is laid. The firefighter is at the nozzle position, the driver is at the pump.
	2 hoses:	12	14	17	Note:
	4.1) in summer	14	16	19	1. When performing the exercise with water supply, 5 seconds are added to the standard time for each hose. Time is fixed at the time water appears from the nozzle.
	4.2) in winter	18	20	23	2. In case of “A” nozzle delivery, 7 seconds are added to the standard time for each hose.
	3 hoses:	20	22	25	3. When delivering a foam nozzle with foam supply, 7 seconds are added to the standard time for each hose.
	4.3) in summer				
	4.4) in winter				

Note:

1. All exercises are performed in combat uniform and equipment (gloves are put on , if necessary).

2. The time for performing single exercises depends on age: up to 30 years – as indicated in the standards, from 30 to 40 years - the time norm increases by 5%, from 40 years and above – by 10%.

3. For the personnel of firefighting teams and crews serving less than six months, the standard time is increased by 10%.

Appendix 8  
to the Instruction for fire safety  
measures in the Armed Forces  
of the Republic of Kazakhstan

Form

**ACT of inspection of the fire protection organization and situation in**

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**(military unit (institution), garrison)**

I, \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

position, military rank, surname and name, patronymic (if any)

Based on Order № \_\_ as of " \_\_ " \_\_\_\_\_ 20\_\_ of the Deputy

Minister of Defense of the Republic of Kazakhstan (Chief of Logistics of the  
Armed Forces of the Republic of Kazakhstan), in the presence of \_\_\_\_\_

\_\_\_\_\_

position, military rank, surname and name, patronymic (if any) military unit or  
institution

checked the organization of and situation with fire protection \_\_\_\_\_.

DEFECTS DISCOVERED:

Administrative area

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

CV fleet area

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

Storage area

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

Technical area

1. \_\_\_\_\_

\_\_\_\_\_



Item №	Name and number of the team	Military unit (garrison)	Personnel		Firefighting equipment	Military rank, surname, name and patronymic of the team's head
			military servicemen	civilian personnel (employees) of the Armed Forces of the Republic of Kazakhstan		

## 2. Status records of the military unit (garrison formations and units, regional command, Armed Forces of the Republic of Kazakhstan)


Item №	Name of the military unit	Inspection date	Document drawn up	Information on firefighting water supply		Availability and condition of automatic fire alarm	Availability and condition of automatic firefighting	Availability of lightning protection		Information on a firefighting team			Fire protection assessment
				Ponds (quantity, capacity)	Hydrants (quantity, diameter)			required	available	personnel	equipment	combat readiness	

## 3. Records of preventive work and training sessions

Item №	Date of activity	Place of activity	Type and short description of the activity	Number of attendees
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Appendix 10  
to the Instruction for fire safety  
measures in the Armed Forces of  
the Republic of Kazakhstan  
Form

### Fire tag


Military unit 66229
Storage facility № 9 Aeronautical depot

One tag the size of 6 x 9 cm is made of yellow thick paper indicating the number of the military unit (the name of the institution) and the name of the facility for each room to be inspected before closing, the tags are registered in the unit's office papers, certified with the signature of the head of the fire protection service (fire protection team) and have a stamp with a registration inventory number on the reverse side. The tags shall be in transparent badges made of durable plastic and be given out to heads of facilities against signature.

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Justice of the Republic of Kazakhstan