

# Guidelines for Maintenance of Fire Service Strength

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**GUIDELINES  
FOR  
MAINTENANCE OF FIRE SERVICE STRENGTH**

January 20, 2000

Notification No. 1 of the Fire and Disaster Management Agency

**FIRST REVISION: Notification No. 28 of the Fire and Disaster  
Management Agency of October 31, 2014**

The Standards for Fire Service Strength  
(Notification No. 2 of the Fire and Disaster Management Agency of 1961) have been entirely  
reviewed.

Guidelines for Maintenance of Fire Service Strength  
(Revision of the Title: Notification No. 9 of the Fire and Disaster Management Agency of 2005)

All municipalities are required to continually and steadily improve and strengthen their fire service strength to perform their duties of protecting the lives, bodies and assets of local residents, taking socioeconomic changes related to fire services into consideration.

To ensure such continual and steady improvement and strengthening of the fire service strength, municipalities must perform certain tasks while implementing the strict safety management of fire personnel. These tasks include (i) improvement and strengthening of the fire suppression system through the advancement of fire defence tactics and fire equipment so that various types of disasters can be dealt with in a precise manner, (ii) improvement and strengthening of the fire prevention system in response to the higher demand for and specialisation of fire prevention work which have resulting from the growing size and complexity of buildings, (iii) improvement and strengthening of the ambulance service system in response to the growing number of ambulance runs and demand for a higher quality ambulance service which have resulted from the progress of the aging society, (iv) improvement and strengthening of the rescue system to conduct rescue operations in a precise manner at the time of disasters of which the complexity and diversity have been growing and (v) improvement and strengthening of the system to implement measures designed to protect the public in an armed attack and other situations.

Moreover, consolidation of a wide area fire service system, including emergency fire response teams, is required to strengthen the preparedness against such large-scale natural disasters as earthquakes, violent storms and floods.

The Guidelines presented here set the standards for municipalities to develop and maintain their fire service strength in view of the situations described above and municipalities are required to establish an adequate fire service system suitable for the actual conditions of each municipality having fully checked the level of the fire service strength in their possession and using the facilities and manpower level specified by the Guidelines as targets.

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## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 1~3)

### CHAPTER 1 GENERAL RULES

#### (Purpose)

- Article 1** The present Guidelines specify the facilities and manpower required for municipalities to execute such affairs concerning fire defence as fire prevention, warning and control, emergency medical services, rescue operations and an emergency response to disasters so that municipalities can sufficiently fulfil their fire service responsibilities in their communications.
- 2 Municipalities shall develop the necessary facilities and manpower using the facilities and manpower specified by the Guidelines as targets.

#### (Definitions)

- Article 2** In these Guidelines, the meanings of the terms listed in the following items shall be as prescribed respectively in these items.
- (i) Urban area: Among densely built-up areas, an area where there is a continuity of blocks with an average building-to-land ratio [the ratio of the total area covered by buildings in a block (of residential quarters enclosed by roads with a width of 4 m or more, rivers and public gardens, etc., the smallest plot; the same shall apply hereinafter) to the area of the said block; the same shall apply hereinafter] of roughly 10% or more or an area where two or more quasi-urban areas are close to one another and where the total population is 10,000 or more
  - (ii) Quasi-urban area: Among densely build-up areas, an area where there is a continuity of blocks with an average building-to-land ratio of roughly 10% or more and where the total population is 1,000 or more but less than 10,000
  - (iii) Fire station/branch: Fire station or its branch
  - (iv) Power fire pump: Automotive fire appliance, hand-operated power pump or small power pump
  - (v) Firefighters: Career firefighters who are engaged in fire watch, fire suppression, and rescue operations at the time of a disaster and/or the control of other types of damage
  - (vi) Prevention personnel: Fire personnel engaged in the prevention of fire
  - (vii) Firefighting teams: Among the firefighting teams prescribed in Article 2 item (viii) of the Fire Service Act (Act No. 186 of 1948; hereinafter referred to as “the Act”), those other than rescue companies or command units
  - (viii) Rescue teams: Rescue teams stipulated in Article 1 of the Ordinance for the Standards for Composition, Equipment and Deployment of Rescue Teams (Ordinance of the Ministry of Home Affairs No. 22 of 1986; hereinafter referred to as “the Ministerial Ordinance for Rescue Teams”)
  - (ix) Command unit: Unit of career firefighters which conducts command operations at a disaster site
  - (x) Ambulance team: Team of career firefighters who are engaged in the ambulance service stipulated in Article 2 item (ix) of the Act

#### (Basic Principles)

- Article 3** Municipalities shall improve their fire service strength to be able to precisely meet the demands of local residents for the fire service, taking the matters described in each of the following items into consideration.
- (i) Improvement of the overall fire service strength by means of making fire personnel possess the necessary abilities to duly perform their duties and establishment of a system whereby fire personnel can conduct coordinated actions
  - (ii) Development of appropriate fire service systems, including a fire suppression system in response to the growing complexity and diversity of disasters, an advanced and

## **GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 3~5)**

specialised fire prevention system in response to the growing size and complexity of properties under fire prevention measures as well as the growing diversity of hazardous materials and an ambulance service system in response to the growing demand for the ambulance service

- (iii) Enhancement of mutual collaboration between fire service organizations, disaster prevention departments of municipalities and voluntary disaster prevention organizations while improving and strengthening volunteer fire corps and also introducing the necessary equipment for the conveyance of disaster information and other purposes to enhance the level of disaster preparedness of local communities to properly deal with disasters
- (iv) Firm development of a wide-area cooperation system with other municipalities, prefectural governments and related organizations to deal with large-scale disasters, armed attack or any other emergency situations and to provide evacuation guidance, etc. in a precise manner

## **CHAPTER 2 GUIDELINES FOR FACILITIES**

### **(Number of Fire Stations/Branches)**

- Article 4** Fire stations/branches shall be established in urban areas and the number of fire stations/ branches in the urban areas listed in Appended Table 1 [Appended Table 2 in the case of areas in extremely snowy and cold areas (hereinafter referred to as “snowy and cold areas); the same shall apply in the rest of this article] shall be determined using the number corresponding to the population size of the urban areas listed in Appended Table 1 as the relevant standard, taking such characteristics as the geological features, road conditions and construction of buildings (hereinafter referred to as “local characteristics”) into consideration.
- 2 Notwithstanding the provision of the preceding paragraph, the number of fire stations/branches to be established in an urban area with a population size exceeding 300,000 (hereinafter referred to as “a large urban area”) shall be determined by firstly dividing the said urban area into a number of sub-areas with a unit population size of 300,000 and using the sum of the number of fire stations/branches as specified in Appended Table 1 for each sub-area, regarding each sub-area as one urban area, as the relevant standard, taking the local characteristics into consideration. In this case, the phrase “population size of urban area” in Appended Table 1 shall be deemed to be replaced by the phrase “population size of each sub-area”.
  - 3 Fire stations/branches may be established in areas which are not classified as urban areas in correspondence with the actual situation of each area.

### **(Number of Power Fire Pumps)**

- Article 5** Power fire pumps shall be deployed in urban areas and the number of power fire pumps in the urban areas listed in Appended Table 3 (Appended Table 4 in the case of extremely snowy and cold areas; the same shall apply in the rest of this article) shall be determined taking the number of power fire pumps to be managed by the fire defense headquarters, fire stations/branches and fire corps listed in Appended Table 3 in correspondence with the population of the said urban area as the relevant standard, taking the local characteristics into consideration.
- 2 Notwithstanding the provision of the preceding paragraph, the number of power fire pumps to be deployed in a large urban area shall be determined by firstly dividing the said large urban area into a number of sub-areas with a unit population size of 300,000 and using the sum of the number of power fire pumps to be managed by the fire defense headquarters, fire stations/branches or fire corps as specified in Appended Table 3 for each sub-area, regarding each sub-area as one urban area, as the relevant standard, taking the local characteristics into con-

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sideration. In this case, the phrase “population size of urban area” in Appended Table 3 shall be deemed to be replaced by the phrase “population size of each sub-area” and, in the case where the population of a sub-area is less than 70,000, the number of power fire pumps to be deployed in the said area shall be in accordance with the note of Appended Table 5 according to the population pertaining to the sub-area listed in the said table.

- 3 The number of power fire pumps to be deployed in a quasi-urban area shall be determined using the number of power fire pumps specified in Appended Table 6 in correspondence with the population of the said quasi-urban area listed in Appended Table 6 as the standard, taking the local characteristics into consideration.
- 4 The number of power fire pumps pursuant to the provision of the preceding paragraph shall be calculated based on the number of discharge ports for each type of power fire pump listed as follows.

Automotive fire appliance	:	2
Hand-operated power pump	:	1
Small power pump	:	1

- 5 The necessary number of power fire pumps shall be deployed in an area not classified as an urban area or quasi-urban area in accordance with the actual situation of the area.
- 6 The power fire pumps prescribed in paragraph (1) through paragraph (3) and the preceding paragraph shall be managed by the fire defense headquarters, fire stations/branches or fire corps.

### (Special Provision for Urban Area or Quasi-Urban Area with a Large Number of Hotels, etc.)

**Article 6** When the ratio of the number of properties under fire prevention measures specified in row (5)-(a) of Appended Table 1 of the Cabinet Order for Enforcement of the Fire Service Act (Cabinet Order No. 37 of 1961) (hereinafter referred to as “the Appended Table of the Enforcement Order”) in an urban area or quasi-urban area to the population size of the said urban area or quasi-urban area is significantly higher than that in other urban or quasi-urban areas, the number combining the population of the said urban area or quasi-urban area and the population calculated by the following formula shall be deemed to constitute the population of the said urban area or quasi-urban area for the purpose of applying the provisions of Article 4 and Article 5.

$$P = \frac{a - 0.64 p}{31}$$

In this formula, P, p and a shall represent the following numerical values.

P : Population to be added (figures below the decimal point are discarded)

p : Population of the said urban area or quasi-urban area

a : Numerical value representing the sum of the aggregate floor areas of the properties under fire prevention measures specified in row (5)-(a) of the Appended Table of the Enforcement Order in the said urban area or quasi urban area (figures less than 1 m<sup>2</sup> are discarded)

### (Ladder Truck)

**Article 7** For the purpose of suppressing a fire and other purposes at buildings of which the height is 15 m or higher (hereinafter referred to as “medium and high-rise buildings”) in the case where the number of medium and high-rise buildings in the area of the jurisdiction of one fire station is roughly 10 or more or the number of medium and high-rise buildings

## **GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 7~8)**

among the properties under fire prevention measures listed in row (1), row (4), row (5)-(a) and row (6)-(a), etc. in the Appended Table of the Enforcement Order is roughly 5 or more, one or more ladder trucks (including aerial platform ladder trucks; the same shall apply hereinafter) shall be deployed at the said fire station or its branch provided, however, that this requirement shall not apply in the case where the area of jurisdiction of the said fire station falls under each of the following items and the absence of such a ladder truck will not hinder firefighting activities to prevent the spread of fire.

- (i) The number of medium and high-rise buildings in the area of jurisdiction of the said fire station is less than 90.
  - (ii) When a fire, etc. takes place at a medium or high-rise building in the area of jurisdiction of the said fire station, ladder trucks deployed at the said fire station and fire stations or their branches of which the areas of jurisdiction are adjacent to that of the said fire station can initiate their turn-out and the commencement of firefighting activities at the scene of the fire in less than 30 minutes.
- 2 The ladder trucks prescribed in the previous paragraph shall be managed by fire stations/branches.

### **(Chemical Trucks)**

**Article 8** Chemical trucks (including large chemical trucks and large aerial platform chemical trucks; the same shall apply hereinafter) shall be deployed to suppress a fire at manufacturing facilities, etc. prescribed in Article 6 paragraph (1) of the Cabinet Order Concerning the Control of Hazardous Materials (Cabinet Order No. 306 of 1959) (hereinafter referred to as "hazardous materials manufacturing facilities, etc.") and places of business, etc. where a nuclear reactor prescribed in Article 2 paragraph (4) of the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors (Act No. 166 of 1957; hereinafter referred to as "nuclear reactor installed places of business, etc.") and their number shall be determined using the sum of the number listed in each of the following items as the standard, taking the number, scale and types, etc. of the hazardous materials manufacturing facilities, etc. and nuclear reactor installed places of business, etc. in a municipality into consideration.

- (i) The number of trucks given under the relevant sub-item below in correspondence with the sum of the numbers obtained by multiplying the number of storage or handling facilities, indoor storage facilities, outdoor storage tank facilities, outdoor storage facilities and general handling facilities for Category IV hazardous materials specified in Appended Table 1 of the Act (hereinafter referred to as "the five types of subject facilities related to Category IV hazardous materials") with the correction coefficient for each of the five types of subject facilities related to Category IV hazardous materials specified in Appended Table 7 (hereinafter referred to as "the total number of facilities after correction")
  - (a) The total number of facilities after correction is 50 or more but less than 500: 1 truck
  - (b) The total number of facilities after correction is 500 or more but less than 1,000: 2 trucks
  - (c) The total number of facilities after correction is 1,000 or more: 2 trucks plus 1 truck per total number of facilities after correction of roughly 1,000
- (ii) The number of trucks given under the relevant sub-item below in correspondence with the sum of the maximum storage quantity and the maximum handling quantity of Category IV hazardous materials to be stored or handled (hereinafter referred to as "the maximum storage/handling quantity of Category IV hazardous materials") at facilities other than those falling under Article 47-4 of the Regulations Concerning the Control of Hazardous Materials (Order of the Prime Minister's Office No. 55 of 1959) among the five types of subject facilities related to Category IV hazardous materials [however, the

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- number is 1 when the maximum storage quantity of Category IV hazardous materials at an outdoor storage tank facility of a single place of business exceeds 1,000 kl in the case where the maximum storage/handling quantity of Category IV hazardous materials is less than 60,000 times the designated quantity (meaning the designated quantity prescribed in Article 9-4 paragraph (1)) of the Act]
- (a) The maximum storage/handling quantity of Category IV hazardous materials is 60,000 times or higher but less than 2.4 million times the designated quantity: 1 truck
  - (b) The maximum storage/handling quantity of Category IV hazardous materials is 2.4 million times or higher but less than 4.8 million times the designated quantity: 2 trucks
  - (c) The maximum storage/handling quantity of Category IV hazardous materials is 4.8 million times the designated quantity or higher: 3 trucks
- (iii) The number of factory or place of business where a reactor for power generation prescribed in Article 2 paragraph (5) of the Nuclear Source Material, etc. Regulating Act or factory or place of business provided with a system or auxiliary facility conducting the reprocessing prescribed in paragraph (10) of the said article is 1 or more: 1 truck
- 2 Notwithstanding the provision of item (i) of the preceding paragraph, a fire truck(s) equipped with a device capable of discharging foam to automotive fire appliances may be deployed instead of a chemical truck(s) up to the number obtained by subtracting the number of trucks given under the said item in the case where the phrase “the five types of subject facilities related to Category IV hazardous materials” is deemed to be replaced by the phrase “the five types of subject facilities related to Category IV hazardous materials (limited to those where the multiple of the designated quantity is 10 or higher)” from the number of chemical trucks listed in the said item.
- 3 The chemical trucks prescribed in paragraph (1) and fire trucks equipped with a device capable of discharging foam to automotive fire appliances prescribed in the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

### **(Large Chemical Trucks)**

- Article 9** In the case where a specified place of business prescribed in Article 2 item (vi) of the Act on the Prevention of Disasters at Petroleum Industrial Complexes and Other Petroleum Facilities (Act No. 84 of 1975; hereinafter referred to as “the Petroleum Disaster Prevention Act”) exists with the installed outdoor storage tanks prescribed in Article 8 paragraph (1) of the Cabinet Order for Enforcement of the Act on the Prevention of Disasters at Petroleum Industrial Complexes and Other Petroleum Facilities (Cabinet Order No. 129 of 1976; hereinafter referred to as “the Cabinet Order for Enforcement of the Petroleum Disaster Prevention Act”) (hereinafter referred to as “the specified place of business”) within the area of a municipality, one large chemical truck, large aerial platform truck and foam solution truck each shall be deployed; provided, however, that this requirement shall not apply when the said municipality can receive an outside response with the dispatch of these trucks by other municipalities.
- 2 In the case where a specified place of business for which two or more each of large chemical truck, large aerial platform truck and foam solution truck must be in place pursuant to the provision of Article 8 paragraph (1) of the Cabinet Order for Enforcement of the Petroleum Disaster Prevention Act [in the case where the specified place of business has tanks equipped with a foam feeding device prescribed in Article 8 paragraph (2) of the Cabinet Order for Enforcement of the Petroleum Disaster Prevention Act, the required number of these trucks to be in place at the said specified place of business shall be the number of these trucks required to be in place pursuant to the provision of paragraph (1) of the said article when the said tanks equipped with a foam feeding device at the said specified facility are deemed not to have a foam feeding device] exists in a municipality and the said municipality falls under each of the following items, two large chemical trucks, large aerial platform



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trucks and foam solution trucks each shall be deployed notwithstanding the provision of the previous paragraph.

- (i) The maximum storage/handling quantity of petroleum pertaining to a petroleum industrial complex or other special disaster prevention area [meaning a petroleum industrial complex or other special disaster prevention area prescribed in Article 2 item (ii) of the Petroleum Disaster Prevention Act; the same shall apply hereinafter] in the area of the said municipality is 4 million kl or more.
  - (ii) There are two or more fire stations of which the areas of jurisdiction cover a petroleum industrial complex or other special disaster prevention area in the area of the said municipality and there is at least one specified place of business with a daily processing capacity of the topping plant of 15,898 kl or more in each area of the jurisdiction of two or more fire stations among the said fire stations.
- 3 In the case of the two preceding paragraphs, when one large aerial platform chemical truck is deployed, one large chemical truck and large aerial platform truck each are deemed to have been deployed.
  - 4 The large chemical trucks, large aerial platform trucks, large aerial platform chemical trucks and foam solution trucks prescribed in the provisions of the three preceding paragraphs shall be managed by the fire defense headquarters or fire stations/branches.

### (Numerical Conversion of Chemical Trucks to Automotive Fire Appliances)

**Article 10** When chemical trucks are deployed pursuant to the provisions of the two preceding articles, the number of automotive fire appliances pursuant to the provisions of Article 5 paragraph (1) through paragraph (3) or paragraph (5) may be reduced by regarding the chemical trucks as automotive fire appliances depending on the actual situation of the area.

### (Foam Concentrates)

**Article 11** The necessary quantity of foam concentrates shall be stockpiled for emergencies, taking the number of the five types of subject facilities related to Category IV hazardous materials, the maximum storage/handling quantity of Category IV hazardous materials, the number of nuclear reactor installed places of business, etc., the number of specified facilities, the type and diameter of the outdoor storage tanks prescribed in Article 8 of the Cabinet Order for Enforcement of the Petroleum Disaster Prevention Act and the types, etc. of petroleum stored in these tanks into consideration.

### (Fireboats)

**Article 12** Fireboats shall be deployed for the suppression of fire and other purposes in an area adjacent to a water area and their number shall be determined taking the local characteristics into consideration using the number obtained by adding the number in each of the following items as the standard.

- (i) One boat in the case where the total length of the water channels to which a fireboat(s) can come alongside in an urban area adjacent to a water area (excluding water channels pertaining to an urban area where a fire can be suppressed by an automotive fire appliance) exceeds 3 km but not more than 5 km with an additional boat for roughly each 5 km when the total length exceeds 5 km.
  - (ii) When an international container hub port, international hub port and major port prescribed in Article 2 paragraph (2) of the Port and Harbour Act (Act No. 218 of 1950) exist in the area of a municipality, the number of boats which are deemed to be necessary for the suppression, etc. of a fire at the said ports.
- 2 The fireboats prescribed in the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 13~16)

### (Ambulances)

- Article 13** The number of ambulances to be deployed at the fire defense headquarters or fire station/branch shall be determined taking the day-time population, the situation of aging and the situation of turn-out pertaining to the EMS of a municipality into consideration using one ambulance per population size of roughly 20,000 as the standard in the case of a municipality of which the population is 100,000 or less or five ambulances plus an additional ambulance per population of roughly 50,000 for a population above 100,000 in a municipality of which the population exceeds 100,000 as the standard.
- 2 The ambulances prescribed in the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

### (Rescue Vehicles)

- Article 14** A number of rescue trucks of which the number is equivalent to the standard deployment number of rescue teams prescribed in Article 3 of the Ministerial Ordinance for Rescue Teams [in the case where the number is increased or decreased in accordance with the provision of paragraph (2) of the said article, the standard deployment number after the said increase or decrease; the same shall apply in the following paragraph] shall be deployed at the fire defense headquarters or fire station/branch.
- 2 Notwithstanding the provision of the preceding paragraph, fire trucks, etc. [meaning the fire trucks, etc. prescribed in Article 17 paragraph (3); the same shall apply in the following paragraph] which are not rescue vehicles but which have the capacity to load rescue equipment and tools similar to those carried by rescue vehicles may be used in place of rescue vehicles and the number of rescue vehicles to be deployed pursuant to the provision of the preceding paragraph may be reduced in regard to the number obtained by deducting the number prescribed in Article 4 of the Ministerial Ordinance for Rescue Teams from the standard number of deployment of rescue companies [in the case where an increase or decrease is made pursuant to paragraph (2) of the said article, the number after the said increase or decrease].
  - 3 The rescue vehicles prescribed in paragraph (1) and fire trucks, etc. which replace the rescue vehicles pursuant to the provision of the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

### (Command Cars)

- Article 15** A command car shall be deployed to conduct command operations at the scene of a disaster and the number of such command cars shall be determined taking the local characteristics into consideration and using the same number of fire stations in the municipality as the standard.
- 2 The command cars prescribed in the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

### (Special Vehicles, etc.)

- Article 16** In addition to the vehicles used for turn-out for firefighting pursuant to the provisions of Article 5, Article 7 through Article 9 and the four preceding articles, smoke venting trucks, forest fire trucks, disaster prevention trucks, rear support vehicles, airplanes etc. (hereinafter referred to as "special vehicles, etc.") shall be deployed depending on the actual situation of an area for the suppression of fire and the prevention, control of disasters, etc.
- 2 The special vehicles, etc. prescribed in the preceding paragraph shall be managed by the fire defense headquarters or fire station/branch.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 17~20)

### (Stand-By Fire Trucks, etc.)

**Article 17** In addition to the automotive fire appliances prescribed in Article 5 (hereinafter referred to as “automotive fire appliances in operation”), reserve automotive fire appliances to be used by fire personnel other than those at work between the time of commencement and time of ending of their shift to deal with flooding, fire or any other type of disaster (hereinafter referred to as “in the case of an emergency”) or to be used when the automotive fire appliances in operation have broken down or become inoperable, using one additional automotive fire appliance per eight automotive fire appliances in operation as the standard in the case of a municipality with a population of 300,000 or less or one additional automotive fire appliance per four automotive fire appliances in operation as the standard in the case of a municipality with a population exceeding 300,000 (hereinafter referred to as “stand-by automotive fire appliances”) shall be deployed depending on the actual situation of an area.

2 In addition to the ambulances prescribed in Article 13 (hereinafter referred to as “ambulances in operation”), reserve ambulances to be used in the case where a large number of people have been injured or become ill or in the case where the ambulances in operation have broken down or become inoperable, using one additional ambulance per six ambulances in operation as the standard in the case of a municipality with a population of 300,000 or less or one additional ambulance per four ambulances in operation as the standard in the case of a municipality with a population exceeding 300,000 (hereinafter referred to as “stand-by ambulances”) shall be deployed depending on the actual situation of an area.

3 Stand-by fire trucks to be used in the case of emergency or in the case where fire trucks, etc. other than automotive fire appliances and ambulances have broken down or become inoperable among fire trucks, etc. (meaning automotive fire appliances, ladder trucks, chemical trucks, large aerial platform ladder trucks, foam solution trucks, ambulances, rescue vehicles, command cars, fireboats and special vehicles, etc.) shall be deployed depending on the actual situation of an area.

4 The stand-by automotive fire appliances prescribed in paragraph (1), stand-by ambulances prescribed in paragraph (2) and the stand-by fire trucks, etc. to be used in the case of emergency, etc. prescribed in the preceding paragraph (hereinafter referred to as “stand-by fire trucks, etc.”) shall be managed by the fire defense headquarters or fire stations/branches

### (Equipment to Respond to NBC Disasters)

**Article 18** Equipment to respond to disasters caused by radioactive materials, biological agents and chemical agents (hereinafter referred to as “equipment to respond to NBC disasters”) shall be deployed at a fire defense headquarters and fire station/branches depending on such circumstances of the area as the population size of the relevant municipality and the siting of an international airport, etc. and nuclear facilities, etc.

2 The equipment to respond to NBC disasters to be deployed by a municipality in accordance with the provision of the preceding paragraph shall be managed by the fire defense headquarters or fire stations/branches.

### (Broadcasting-Type Administrative Radio System for Disaster Prevention)

**Article 19** A broad-casting type administrative radio system for disaster prevention shall be installed in a municipality to ensure the swift and accurate conveyance of disaster information to local residents at the time of a disaster.

### (Exclusive Fire Service Telephones)

**Article 20** Exclusive fire service telephones shall be installed at the fire defense headquarters and fire stations/branches for mutual communication.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 21~26)

### (Communication Equipment)

**Article 21** The necessary communication equipment shall be installed at the fire defense headquarters and offices of fire corps for mutual communication.

- 2 The necessary communication equipment shall be installed at the office of the fire corps for communication with its branches.

### (Fire Service and EMS Radio Equipment)

**Article 22** Fire service and EMS radio equipment shall be installed at the fire defense headquarters and fire trucks, etc. for mutual communication between the fire defense headquarters and fire trucks, etc. and also for mutual communication between fire trucks, etc.

### (Earthquake-Resistance of the Fire Defense Headquarters, Fire Stations/Branches)

**Article 23** The government buildings housing the fire defense headquarters and fire stations/branches shall be constructed with sufficient earthquake-resistance as well as the ability to withstand flood damage to ensure their proper functioning as bases to implement emergency disaster response measures at the time of an earthquake and wind and flood disasters.

- 2 An emergency power generation system, etc. shall be installed at the fire defense headquarters and fire stations/branches to ensure their proper functioning as bases to implement emergency disaster response measures at the time of an earthquake and wind and flood disasters.
- 3 In preparation for the case where the government buildings of the fire defense headquarters, and fire stations/branches find it difficult to maintain their functions as bases to implement emergency disaster response measures because of damage caused to them at the time of an earthquake and wind and flood disasters, the fire defense headquarters shall formulate a plan in advance to secure the said functions using other fire stations/branches and public facilities, etc.

### (Stockpiling of Disaster Control Equipment and Materials by Prefectural Governments)

**Article 24** Prefectural governments shall stockpile or put in place the necessary disaster control equipment, materials and facilities depending on the actual situation of the area to prevent the spread of wide-area disasters, such as forest fires and disasters at petroleum industrial complexes, etc., or large-scale disasters and shall loan them in response to requests made by municipalities to allow their use by municipalities to supplement the fire service strength of municipalities.

## CHAPTER 3 GUIDELINES FOR MANPOWER

### (Duties of Fire Chief)

**Article 25** The fire chief shall undergo training to acquire knowledge and skills concerning the fire service and shall possess wide-ranging and excellent insight, etc. so as to strive to make the fire service strength of the fire defense headquarters under his control fully perform.

### (Vocational Abilities of Fire Personnel)

**Article 26** Fire personnel shall acquire the ability specified in each of the following items and improve their professional expertise in correspondence with the category of personnel indicated in each item by means of undergoing training, etc. so that they can properly perform the matters listed in each of the items of Article 3 and shall strive to enhance their vocational abilities in a comprehensive manner by acquiring the relevant knowledge and skills through their experience of different types of work.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 26~27)

- (i) Firefighters: Ability to conduct firefighting, etc. at the scene of a disaster in a precise manner while possessing knowledge and skills concerning defense operations against such disasters as floods, fires and earthquakes
- (ii) Prevention personnel: Ability to conduct fire prevention work, etc. in a precise manner while possessing the knowledge and skills concerning fire inspection (including fire investigation), fire prevention management, hazardous materials and fire defense equipment, etc.
- (iii) Ambulance personnel: Ability to conduct the transportation of injured or ill persons and other activities in a precise manner while possessing knowledge of emergency medicine and knowledge as well as skills concerning observation and first aid, etc. for injured or ill persons
- (iv) Rescue personnel: Ability to conduct rescue operations and other activities in a precise manner while possessing knowledge and skills concerning the handling of rescue equipment and rescue methods, etc. relevant to various disasters

### (Members of Firefighting Teams)

**Article 27** The number of members of a firefighting team on board an automotive fire appliance (excluding those deployed at fire stations/branches in areas which do not fall in the category of an urban area) shall be five per automotive appliance; provided, however, that the number of members of the said firefighting team may be reduced to four in the case where the said firefighting team has equipment to communicate information required for firefighting between the members and the said vehicle has equipment or devices to reduce the burden of the work to extend hoses. In the case where a fire suppression effect equivalent to or higher than the fire suppression effect resulting from the independent operations of two firefighting teams is achieved through the collaborative operation of two firefighting teams, the number of members may be reduced to four for either firefighting team.

- 2 The number of members of a firefighting team to operate a hand-operated power pump or small power pump shall be four per pump.
- 3 The number of members of a firefighting team on board a ladder truck (excluding those deployed at fire stations/branches in areas which do not fall in the category of an urban area) shall be five per truck; provided, however, that the number of members of the said firefighting team may be reduced to four in the case where the said vehicle has an automatic stoppage device to reduce the work to monitor hazards during ladder operation and collaborative activities with another firefighting team or rescue team are planned in advance.
- 4 The number of members of a firefighting team on board a chemical truck (excluding those deployed at fire stations/branches in areas which do not fall in the category of an urban area) shall be five per chemical truck; provided, however, that the number of members of the said firefighting team may be reduced to four in the case where the said firefighting team has equipment to communicate information required for firefighting between the members and the said vehicle has equipment or devices to reduce the burden of the work to extend hoses.
- 5 The number of members of a firefighting team on board a fire truck, etc. other than those prescribed in paragraph (1), paragraph (3) and the preceding paragraph [excluding ambulances, airplanes used for EMS (hereinafter referred to as "EMS airplanes") among airplanes, rescue trucks and command cars] shall be that which is deemed to be sufficient to fully perform the functions of each vehicle.
- 6 One of the members of a firefighting team prescribed in paragraph (1) and paragraph (2) shall be a person having the rank of fire sergeant or higher in the case of the fire defense headquarters and fire station/branch or a person having the rank of crew chief or higher in the case of a fire corps.

## **GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 27~31)**

- 7 One of the members of a firefighting team prescribed in paragraph (3) and paragraph (4) shall be a person having the rank of fire sergeant or higher.

### **(Members of Ambulance Teams)**

**Article 28** The number of members of an ambulance team on board an ambulance shall be three per ambulance; provided, however, that the number may be reduced to two per ambulance in the case where an injured or ill person(s) is transported from one medical institution to another medical institution accompanied by a doctor, nurse, assistant nurse or emergency life-saving technician working for one of these medical facilities.

- 2 In areas where the number of incidents requiring EMS is especially large, personnel to replace the members of the ambulance teams on board ambulances will be secured depending on the actual situation of the areas.
- 3 The number of members of an ambulance team on board an EMS airplane shall be two per EMS aircraft.
- 4 One of the members of an ambulance team on board an ambulance shall be a person having the rank of fire sergeant or higher.
- 5 At least one of the members of an ambulance team on board an ambulance prescribed in paragraph (1) or on board an EMS aircraft prescribed in paragraph (3) shall be an emergency life-saving technician.

### **(Members of Rescue Teams)**

**Article 29** The number of members of a rescue team on board a rescue truck shall be five per rescue truck.

- 2 One of the members of a rescue team on board a rescue truck prescribed in the preceding paragraph shall be a person having the rank of fire sergeant or higher.
- 3 A number of rescue personnel who are deemed to be necessary in the light of the actual situation of an area may be deployed at fire corps in those areas where disasters or accidents requiring rescue operation frequency occur.

### **(Members of Command Units)**

**Article 30** The number of members of a command unit on board a command car shall be three or more per command car; provided, however, that the number of members on board a command car shall be four or more for those command cars deployed at fire stations of which the area of jurisdiction covers department stores, underground malls, large-scale manufacturing facilities of hazardous materials and other special facilities where the occurrence of a disaster is likely to threaten the lives of many people or create difficulties for fire-fighting activities.

- 2 One of the members of a command unit on board a command car prescribed in the preceding paragraph shall be a person having the rank of fire captain or higher.

### **(Communication Personnel)**

**Article 31** Communication personnel shall always be deployed at the fire defense headquarters and fire stations.

- 2 The total number of communication personnel to be deployed at the fire defense headquarters shall be 5 per population of roughly 100,000 as the standard in the case of a municipality of which the population is 300,000 or less or 15 plus 3 additional communication personnel per population of roughly 100,000 for a population above 300,000 as the standard in the case of a municipality of which the population exceeds 300,000 taking the communication and command system, functions of the communication facilities and number of emergency reports received, etc. into consideration.

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- 3 The number of communication personnel who are simultaneously engaged in communication and command control work among the communication personnel deployed at the fire defense headquarters shall be two or more; provided, however, that the number of the said communication personnel may be temporarily reduced in the case of an emergency or other unavoidable situation.

### (Prevention Personnel at the Fire Defense Headquarters and Fire Stations/Branches)

**Article 32** The number of prevention personnel at the fire defense headquarters and fire stations/branches shall be determined using the sum of the number obtained under each of the following items as the standard, taking the population of the municipality, area of the municipality, number and types of facilities handling a small quantity of hazardous materials, number of consents given by the fire chief or station chief in the municipality based on Article 7 of the Fire Service Act, number of notifications pertaining to the installation of fire equipment, etc., existence or non-existence of special disaster prevention areas, such as petroleum industrial complexes and others, and the execution system for affairs concerning fire prevention into consideration.

- (i) The number obtained by multiplying the number of specified properties under fire prevention measures (meaning specified properties under fire prevention measures prescribed in Article 17-2-5 paragraph (2) item (iv) of the Act; the same shall apply hereinafter) in the municipality by twelve-seven hundred and thirtieths ( $12/730$ )
  - (ii) The number obtained by multiplying the properties under fire prevention measures other than the specified properties under fire prevention measures in the municipality by two-two thousand and four hundredths ( $2/2,400$ )
  - (iii) The number obtained by multiplying the number of detached houses in the municipality by three-twenty two thousandths ( $3/22,000$ )
  - (iv) The number obtained by dividing the sum of the numbers obtained by multiplying the number of manufacturing facilities, etc. which correspond to each category of manufacturing facilities, etc. of hazardous materials listed in Appended Table 8 established in the municipality by the relevant correction coefficient specified in the said table by one hundred and fifty (150)
- 2 In the case of the preceding paragraph, the number of prevention personnel corresponding to the number obtained by adding the numbers listed in item (i), item (ii) and item (iv) of the said paragraph shall be two or more.
  - 3 One or more qualified fire prevention engineers with the qualifications specified by the Commissioner of the Fire and Disaster Management Agency for persons with advanced knowledge and skills concerning fire prevention shall be deployed at a desk or an organization equivalent to a desk in charge of fire prevention at the fire defense headquarters and fire stations to ensure the proper execution of the operations, etc. concerning fire prevention, taking the types and scale of the properties under fire prevention measures and manufacturing facilities, etc. of hazardous materials which exist in the areas of jurisdiction of the said fire defense headquarters and fire stations into consideration.

### (Standards for Multiple Job Assignments)

**Article 33** In the case where the frequency of fire occurrence when an ambulance has responded in the area of jurisdiction of the fire defense headquarters or a fire station/branch at which an automotive fire appliance, ladder truck or chemical truck and an ambulance are deployed is roughly less than once every two years, where the required number of members of a firefighting team for the swift turning-out of an automotive fire appliance, ladder truck or chemical truck can be secured by each fire defense headquarters or fire station/branch concerned even if the said ambulance has already responded and where it is difficult to de-

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ploy dedicated members of an ambulance team on board the said ambulance, members of the firefighting team on board the said automotive fire appliance, ladder truck or chemical truck may act as members of an ambulance team on board an ambulance.

- 2 In the case where a fire starts in the area of jurisdiction of an urban fire station/branch at which an automotive fire appliance (including a chemical truck which may be considered an automotive fire appliance pursuant to the provision of Article 10; the same shall apply in the rest of this paragraph) and an ambulance are deployed and when the said ambulance has already responded, the members of the firefighting team on board the said automotive fire appliance may act as members of an ambulance team on board an ambulance provided that firefighting operation to prevent the spread of the fire can be conducted without hindrance by the turning-out of an automotive fire appliance deployed at a fire station/branch of which the area of jurisdiction is adjacent to the said fire station/branch (hereinafter referred to as "the neighbouring fire station/branch" in the rest of this paragraph), that there is a system capable of constantly monitoring the situation of the turning-out, etc. of the automotive fire appliance and ambulance of the said fire station/branch by the neighbouring fire station/branch and that it is difficult to deploy dedicated members of the ambulance team on board the said ambulance.
- 3 Notwithstanding the provision of paragraph (1) of the preceding article, the number of prevention personnel within the range of not exceeding the sum of the number obtained by multiplying the number listed in item (ii) of the said paragraph by 0.5 and the number listed in item (iii) of the said paragraph may be met by the required number of firefighters as long as the execution of prevention operation is not hindered; provided, however, that this arrangement shall not apply in the case where the number of prevention personnel corresponding to the number obtained by subtracting the number listed in following item (ii) from the number listed in following item (i) is below two.
  - (i) The sum of the numbers listed in item (i), item (ii) and item (iv) of paragraph (1) of the preceding area
  - (ii) The number of prevention personnel which is supposed to be met by firefighters of which the number is deemed to correspond to the number within the range of not exceeding half of the number specified in paragraph (1) item (ii) of the preceding article
- 4 In the case of the preceding paragraph, firefighters who satisfy the requirements specified in each of the following items shall be used to conduct the operation listed in each item.
  - (i) On-site inspection at an apartment house subject to the compulsory installation of fire defense equipment, etc. (excluding fire extinguishing appliances) pursuant to Article 17 of the Act: A qualified fire prevention engineer prescribed in paragraph (3) of the preceding article
  - (ii) On-site inspection of an apartment house other than that listed in the preceding item: A person who has completed a fire prevention inspection course prescribed in Article 5 paragraph (2) item (iii) of the Standards for Education and Training at a Fire Academy (Notification of the Fire and Disaster Management Agency No. 3 of 2003) or a person who has knowledge and skills equal or superior to those of a person who has completed the said course
  - (iii) Fire prevention guidance at an apartment house or a detached house: A person who is deemed to have the necessary knowledge and skills required to conduct the said operation

### **(Total Number of Fire Personnel at the Fire Defense Headquarters and Fire Stations/Branches)**

**Article 34** The total number of fire service personnel working at the fire defense headquarters and fire stations/branches shall be determined using the sum obtained by adding the number in each of the following items as the standard, taking the work arrangements, sys-



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tem for the implementation of operations, number of annual holidays, number of education and training days and other relevant matters into consideration.

- (i) The number of the necessary members of firefighting teams, ambulance teams, rescue teams and command units to regularly operate fire trucks, etc. managed by the fire defense headquarters and fire stations/ branches other than stand-by fire trucks, etc. (however, in the case where it is specified in advance by the Commissioner of the Fire and Disaster Management Agency that a single firefighting team may board different fire trucks, etc., taking the size of the fire defense headquarters and the situation of possession of fire trucks, etc. into consideration, as long as fire suppression operation, etc. is not hindered, the number of members of the said firefighting team shall be the maximum number among the number of members of firefighting teams required to operate individual fire trucks, etc. in the case where these fire trucks, etc. are constantly operated)
  - (ii) The number of communication personnel prescribed in Article 31
  - (iii) The number of prevention personnel prescribed in Article 32 paragraph (1)
  - (iv) The number of fire personnel required to execute the general affairs, etc. (including operations concerning mutual assistance for fire defense) of the fire defense headquarters and fire stations/branches
- 2 For calculation of the total number of fire personnel pursuant to the provision of the preceding paragraph, in the case where members of a firefighting team on board an automotive fire appliance, ladder truck or chemical truck also act as members of an ambulance team on board an ambulance pursuant to the provisions of paragraph (1) and paragraph (2) of the preceding article, the word "however" in item (i) of the preceding paragraph shall be deemed to be replaced by the phrase "however, the number of members of a firefighting team who also act as members of an ambulance team shall be the number of members of a firefighting team required to regularly operate an automotive fire appliance, ladder truck or chemical truck to be boarded by members of the said firefighting team". Similarly, in the case where firefighters act as prevention personnel pursuant to the provision of paragraph (3) of the preceding article, the phrase "number of prevention personnel" in item (iii) of the preceding paragraph shall be deemed to be replaced by the phrase "number obtained by subtracting the number of firefighters acting as prevention personnel from the number of prevention personnel".

### **(Establishment of Fire Corps)**

**Article 35** One fire corps shall be established in a single municipality as a core entity of the local disaster prevention strength which cannot be substituted in future years; provided, however, that two or more fire corps may be established in a single municipality if there are special circumstances, including the merger of municipalities, concerning the history or any other relevant aspects of the fire corps.

### **(Operations and Total Number of Personnel of Fire Corps)**

**Article 36** A fire corps shall be engaged in the operations listed in each of the following items and the total number of personnel shall be the number required to smoothly execute the said operations in the light of the actual situation of the area.

- (i) Operations concerning fire suppression
- (ii) Operations concerning fire prevention and precautions
- (iii) Operations concerning rescue
- (iv) Operations concerning the prevention, precautions and control, etc. of such disasters as earthquakes and wind and flood disasters as well as evacuation guidance, etc. for local residents at the time of a disaster
- (v) Operation concerning measures to protect people, including conveyance of warning and evacuation guidance, etc. for local residents, in such situations as armed attacks

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Article 36~37)

and others

- (vi) Operation concerning guidance for, cooperation with, support for and education of local residents (including voluntary disaster prevention organizations, etc.), etc.
- (vii) Operation concerning the handling of general affairs, etc. of the fire corps
- (viii) Operation specially required in correspondence with the actual situation of the area in addition to that listed under each of the preceding items

### **(Deputy Chief, etc. of Fire Corps)**

**Article 37** The deputy chief, division chiefs, assistant division chiefs, company chiefs and crew chiefs may be deployed at a fire corps for the purpose of conducting command activities.

**GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Appended Table)**

**APPENDED TABLE**

**Appended Table 1 [RE: Article 4 paragraph (1)]**

Population of Urban Area (Unit: 10,000)	Number of Fire Stations/Branches
1	1
2	1
3	1
4	2
5	2
6	2
7	3
8	3
9	3
10	3
11	4
12	4
13	4
14	4
15	5
16	5
17	5
18	5
19	6
20	6
21	6
22	6
23	7
24	7
25	7
26	8
27	8
28	8
29	8
30	9

Note: The population of an urban area is determined by rounding to the nearest 10,000.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Appended Table)

**Appended Table 2** [Re: Article 4 paragraph (1)]

Population of Urban Area (Unit: 10,000)	Number of Fire Stations/Branches
1	1
2	1
3	1
4	2
5	2
6	2
7	3
8	3
9	3
10	4
11	4
12	4
13	5
14	5
15	5
16	5
17	6
18	6
19	6
20	7
21	7
22	7
23	8
24	8
25	8
26	9
27	9
28	9
29	10
30	10

Note: The population size of an urban area is determined by rounding to the nearest 10,000.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Appended Table)

**Appended Table 3** [RE: Article 5 paragraph (1)]

Population of Urban Area (Unit: 10,000)	Number of Power Fire Pumps Managed by the Fire Defense Headquarters and Fire Stations/Branches	Number of Power Fire Pumps Managed by Fire Corps
1	Automotive fire appliance: 2	Automotive fire appliance: 3 Hand-operated power pump or small power pump: 1
2	Automotive fire appliance: 2	Automotive fire appliance: 3 Hand-operated power pump or small power pump: 2
3	Automotive fire appliance: 3	Automotive fire appliance: 2 Hand-operated power pump or small power pump: 3
4	Automotive fire appliance: 4	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 4
5	Automotive fire appliance: 4	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 5
6	Automotive fire appliance: 5	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 6
7	Automotive fire appliance: 6	Power fire pump: 7
8	Automotive fire appliance: 6	Power fire pump: 7
9	Automotive fire appliance: 6	Power fire pump: 7
10	Automotive fire appliance: 6	Power fire pump: 8
11	Automotive fire appliance: 7	Power fire pump: 9
12	Automotive fire appliance: 7	Power fire pump: 10
13	Automotive fire appliance: 7	Power fire pump: 10
14	Automotive fire appliance: 7	Power fire pump: 11
15	Automotive fire appliance: 8	Power fire pump: 11
16	Automotive fire appliance: 8	Power fire pump: 12
17	Automotive fire appliance: 8	Power fire pump: 12
18	Automotive fire appliance: 8	Power fire pump: 13
19	Automotive fire appliance: 9	Power fire pump: 14
20	Automotive fire appliance: 9	Power fire pump: 15
21	Automotive fire appliance: 10	Power fire pump: 15
22	Automotive fire appliance: 10	Power fire pump: 16
23	Automotive fire appliance: 10	Power fire pump: 17
24	Automotive fire appliance: 11	Power fire pump: 17
25	Automotive fire appliance: 11	Power fire pump: 18
26	Automotive fire appliance: 12	Power fire pump: 19
27	Automotive fire appliance: 12	Power fire pump: 20
28	Automotive fire appliance: 13	Power fire pump: 20
29	Automotive fire appliance: 13	Power fire pump: 21
30	Automotive fire appliance: 14	Power fire pump: 21

**Notes**

- (1) The population size of an urban area is determined by rounding to the nearest 10,000.
- (2) The number of power fire pumps managed by a fire corps in the case where the population of an urban area is 70,000 or higher shall be the number which is calculated based on the provision of Article 5 paragraph (4) as the required number of the said power fire pumps and which satisfies the number of power fire pumps to be managed by a fire corps as prescribed in this table.

**GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Appended Table)**

**Appended Table 4** [Re: Article 5 paragraph (1)]

Population Size of Urban Area (Unit: 10,000)	Number of Power Pumps Managed by the Fire Defense Headquarters and Fire Stations/Branches	Number of Power Fire Pumps Managed by Volunteer Fire Corps
1	Automotive fire appliance: 2	Automotive fire appliance: 3 Hand-operated power pump or small power pump: 2
2	Automotive fire appliance: 2	Automotive fire appliance: 3 Hand-operated power pump or small power pump: 3
3	Automotive fire appliance: 3	Automotive fire appliance: 2 Hand-operated power pump or small power pump: 4
4	Automotive fire appliance: 4	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 5
5	Automotive fire appliance: 4	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 6
6	Automotive fire appliance: 5	Automotive fire appliance: 1 Hand-operated power pump or small power pump: 7
7	Automotive fire appliance: 6	Power fire pump: 8
8	Automotive fire appliance: 6	Power fire pump: 8
9	Automotive fire appliance: 6	Power fire pump: 9
10	Automotive fire appliance: 7	Power fire pump: 9
11	Automotive fire appliance: 7	Power fire pump: 10
12	Automotive fire appliance: 7	Power fire pump: 11
13	Automotive fire appliance: 8	Power fire pump: 12
14	Automotive fire appliance: 8	Power fire pump: 12
15	Automotive fire appliance: 8	Power fire pump: 13
16	Automotive fire appliance: 9	Power fire pump: 13
17	Automotive fire appliance: 9	Power fire pump: 14
18	Automotive fire appliance: 10	Power fire pump: 15
19	Automotive fire appliance: 10	Power fire pump: 16
20	Automotive fire appliance: 11	Power fire pump: 17
21	Automotive fire appliance: 11	Power fire pump: 18
22	Automotive fire appliance: 12	Power fire pump: 18
23	Automotive fire appliance: 12	Power fire pump: 19
24	Automotive fire appliance: 13	Power fire pump: 20
25	Automotive fire appliance: 13	Power fire pump: 21
26	Automotive fire appliance: 14	Power fire pump: 22
27	Automotive fire appliance: 14	Power fire pump: 23
28	Automotive fire appliance: 15	Power fire pump: 23
29	Automotive fire appliance: 15	Power fire pump: 24
30	Automotive fire appliance: 16	Power fire pump: 25

Notes

- (1) The population size of an urban area is determined by rounding to the nearest 10,000.
- (2) The number of power fire pumps managed by a fire corps in the case where the population of an urban area is 70,000 or higher shall be the number which is calculated based on the provision of Article 5 paragraph (4) as the required number of the said power fire pumps and which satisfies the number of power fire pumps to be managed by a fire corps as prescribed in this table.

## GUIDELINES FOR MAINTENANCE OF FIRE SERVICE STRENGTH (Appended Table)

**Appended Table 5** [Re: Article 5 paragraph (2)]

Population of Sub-Urban Area (Unit: 10,000)	Number of Power Pumps Managed by the Fire Defense Headquarters and Fire Stations/Branches	Number of Power Fire Pumps Managed by Volunteer Fire Corps
1	Automotive fire appliance: 1	Power fire pump: 1
2	Automotive fire appliance: 1	Power fire pump: 2
3	Automotive fire appliance: 2	Power fire pump: 3
4	Automotive fire appliance: 3	Power fire pump: 4
5	Automotive fire appliance: 3	Power fire pump: 5
6	Automotive fire appliance: 4	Power fire pump: 6

**Notes**

- (1) The population of a sub-urban area is determined by rounding to the nearest 10,000.
- (2) The number of power fire pumps managed by a fire corps shall be the number which is calculated based on the provision of Article 5 paragraph (4) as the required number of the said power fire pumps and which satisfies the number of power fire pumps to be managed by a fire corps as prescribed in this table.

**Appended Table 6** [Re: Article 5 paragraph (3)]

Population of Quasi-Urban Area (Unit: person)	Number of Power Fire Pumps to be Deployed in Quasi-Urban Area
1,000 or more but less than 3,000	Power fire pump: 4
3,000 or more but less than 5,000	Power fire pump: 6
5,000 or more but less than 10,000	Power fire pump: 8

**Note:** The number of power fire pumps to be deployed in a quasi-urban area shall be the number which is calculated based on the provision of Article 5 paragraph (4) as the required number of the said power fire pumps and which satisfies the number of power fire pumps to be deployed in a quasi-urban area as prescribed in this table.

**Appended Table 7** [Re: Article 8 paragraph (1) item (i)]

Five Types of Subject Facilities Related to Category IV Hazardous Materials	Correction Coefficient
Manufacturing facilities	5
Indoor storage facilities	0.1
Outdoor storage tank facilities,	1
Outdoor storage facilities	0.1
General handling facilities	1.5

**Appended Table 8** [Re: Article 32 paragraph (1) item (iv)]

Category of Manufacturing Facilities, etc. of Hazardous Materials	Correction Coefficient
Manufacturing facilities, etc. for which prevention rules must be established (excluding filling stations)	1.8
Manufacturing facilities, indoor storage facilities, outdoor storage tank facilities, outdoor storage facilities and general handling facilities (excluding manufacturing facilities, etc. for which prevention rules must be established)	1.0
Underground storage tank facilities and filling stations	0.9
Indoor storage tank facilities, simple storage tank facilities, mobile storage tank facilities and sales stations	0.7





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