Reference: 18.3.2.5.3(11) – (12), 19.3.2.5.3(11) – (13), related 18.3.4 and 19.3.4 alarm system provisions, and associated advisory annex

TIA 12-2
(SC 12-10-6/TIA Log #1075)

Pursuant to Section 5 of the NFPA Regulations Governing Committee Projects, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 101, *Life Safety Code*, 2012 edition. The TIA was processed by the Technical Committee on Health Care Occupancies and the Correlating Committee on Safety to Life, and was issued by the Standards Council on October 30, 2012, with an effective date of November 19, 2012.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a proposal of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

1. Revise 18.3.2.5.3 (11) – (12), 19.3.2.5.3 (11) – (13), related 18.3.4 and 19.3.4 alarm system provisions, and associated advisory annex as follows:

<table>
<thead>
<tr>
<th>Chapter 18  New Health Care Occupancies</th>
<th>Chapter 19  Existing Health Care Occupancies</th>
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<tbody>
<tr>
<td><strong>18.3.2.5.3</strong> Within a smoke compartment, where residential or commercial cooking equipment is used to prepare meals for 30 or fewer persons, one cooking facility shall be permitted to be open to the corridor, provided that all of the following conditions are met: (1) The portion of the health care facility served by the cooking facility is limited to 30 beds and is separated from other portions of the health care facility by a smoke barrier constructed in accordance with 18.3.7.3, 18.3.7.6, and 18.3.7.8. (2) The cooktop or range is equipped with a range hood of a width at least equal to the width of the cooking surface, with grease baffles or other grease-collecting and clean-out capability. (3)* The hood systems have a minimum airflow of 500 cfm (14,000 L/min). (4) The hood systems that are not ducted to the exterior additionally have a charcoal filter to remove smoke and odor. (5) The cooktop or range complies with all of the following: (a) The cooktop or range is protected with a fire suppression system listed in accordance with UL 300, <em>Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment</em>, or is tested and meets all requirements of UL 300A.</td>
<td><strong>19.3.2.5.3</strong> Within a smoke compartment, where residential or commercial cooking equipment is used to prepare meals for 30 or fewer persons, one cooking facility shall be permitted to be open to the corridor, provided that all of the following conditions are met: (1) The portion of the health care facility served by the cooking facility is limited to 30 beds and is separated from other portions of the health care facility by a smoke barrier constructed in accordance with 19.3.7.3, 19.3.7.6, and 19.3.7.8. (2) The cooktop or range is equipped with a range hood of a width at least equal to the width of the cooking surface, with grease baffles or other grease-collecting and clean-out capability. (3)* The hood systems have a minimum airflow of 500 cfm (14,000 L/min). (4) The hood systems that are not ducted to the exterior additionally have a charcoal filter to remove smoke and odor. (5) The cooktop or range complies with all of the following: (a) The cooktop or range is protected with a fire suppression system listed in accordance with UL 300, <em>Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment</em>, or is tested and meets all requirements of UL 300A.</td>
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Extinguishing System Units for Residential Range Top Cooking Surfaces, in accordance with the applicable testing document's scope.

(b) A manual release of the extinguishing system is provided in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, Section 10.5.

(c) An interlock is provided to turn off all sources of fuel and electrical power to the cooktop or range when the suppression system is activated.

(6)* The use of solid fuel for cooking is prohibited.

(7)* Deep-fat frying is prohibited

(8) Portable fire extinguishers in accordance with NFPA 96 are located in all kitchen areas.

(9)* A switch meeting all of the following is provided:

  (a) A locked switch, or a switch located in a restricted location, is provided within the cooking facility that deactivates the cooktop or range.

  (b) The switch is used to deactivate the cooktop or range whenever the kitchen is not under staff supervision.

  (c) The switch is on a timer, not exceeding a 120-minute capacity, that automatically deactivates the cooktop or range, independent of staff action.

(10) Procedures for the use, inspection, testing, and maintenance of the cooking equipment are in accordance with Chapter 11 of NFPA 96 and the manufacturer’s instructions and are followed.

(11)* Not less than two AC-powered photoelectric smoke alarms with battery backup, interconnected in accordance with 9.6.2.10.3, and equipped with a silence feature are located not closer than 20 ft (6.1 m) and not further than 25 ft (7.6 m) from the cooktop or range.

(12)* The smoke alarms required by 18.3.2.5.3(11) are permitted to be located outside the kitchen area where such placement is necessary for compliance with the 20-ft (7.6-m) minimum distance criterion.

(13)* A single system smoke detector is permitted to be installed in lieu of the smoke alarms required in 18.3.2.5.3(11) provided the following criteria are met:

  (a) The detector is located not closer than 20 ft (6.1 m) and not further than 25 ft (7.6 m) from the cooktop or range.

  (b) The detector is permitted to initiate a local audible alarm signal only.

  (c) The detector is not required to initiate a building-wide occupant notification signal.

  (d) The detector is not required to notify the emergency forces.

  (e) The local audible signal initiated by the detector is permitted to be silenced and reset by a button on the detector or by a switch installed within 10 ft (3.0 m) of the system smoke detector.

(14) System smoke detectors that are required to be installed in corridors or spaces open to the corridor by other sections of this chapter are not used to meet the requirements of 18.3.2.5.3(11) and are located not closer than 25 ft (7.6 m) to the cooktop or range.

(15) The smoke compartment is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
### 18.3.4.2.1 Initiation of the required fire alarm systems shall be by manual means in accordance with 9.6.2 and by means of any required sprinkler system waterflow alarms, detection devices, or detection systems, unless otherwise permitted by 18.3.4.2.2 and 18.3.4.2.3.

**18.3.4.2.3** The system smoke detector installed in accordance with 18.3.2.5.3(13) shall not be required to initiate the fire alarm system.

### 18.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

1. Paragraph 9.6.3.2.3 shall not be permitted to be used.
2. In lieu of audible alarm signals, visible alarm-indicating appliances shall be permitted to be used in critical care areas.
3. The provision of 18.3.2.5.3(13)(c) shall be permitted to be used.

### 19.3.4.2.1 Initiation of the required fire alarm systems shall be by manual means in accordance with 9.6.2 and by means of any required sprinkler system waterflow alarms, detection devices, or detection systems, unless otherwise permitted by 19.3.4.2.2 through 19.3.4.2.5.

**19.3.4.2.3** The system smoke detector installed in accordance with 19.3.2.5.3(13) shall not be required to initiate the fire alarm system.

### 19.3.4.2.4 Fixed extinguishing systems protecting commercial cooking equipment in kitchens that are protected by a complete automatic sprinkler system shall not be required to initiate the fire alarm system.

### 19.3.4.2.5 Detectors required by 19.7.5.3 and 19.7.5.5 shall not be required to initiate the fire alarm system.

### 19.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

1. In lieu of audible alarm signals, visible alarm-indicating appliances shall be permitted to be used in critical care areas.
2. Where visual devices have been installed in patient sleeping areas in place of an audible alarm, they shall be permitted where approved by the authority having jurisdiction.
3. The provision of 19.3.2.5.3(13)(c) shall be permitted to be used.

### A.18.3.2.5.3 The intent of 18.3.2.5.3 is to limit the number of persons for whom meals are routinely prepared to not more than 30. Staff and feeding assistants are not included in this number.

**A.18.3.2.5.3(3)** The minimum airflow of 500 cfm (14,000 L/m) is intended to require the use of residential hood equipment at the higher end of equipment capacities. It is also intended to draw a sufficient amount of the cooking vapors into the grease baffle and filter system to reduce migration beyond the hood.

**A.18.3.2.5.3(6)** The intent of this provision is to limit cooking fuel to gas or electricity. The prohibition of solid fuels for cooking is not intended to prohibit charcoal grilling on grills located outside the facility.

**A.18.3.2.5.3(7)** Deep-fat frying is defined as a cooking method that involves fully immersing food in hot oil.

**A.18.3.2.5.3(9)** The intent of this requirement is that the fuel source for the cooktop or range is to be turned on only when staff is present or aware that the kitchen is being used. The timer function is meant to provide an additional safeguard if the staff forgets to deactivate the cooktop or range. If a cooking activity lasts longer than 120 minutes, the timer would be required to be manually reset.

**A.18.3.2.5.3(11)** Protection of the cooktop or range is accomplished by the sprinklers that are required in the facility. It is intended to prevent migration of cooking vapors beyond the hood.

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**A.19.3.2.5.3(11)** Protection of the cooktop or range is accomplished by the sprinklers that are required in the facility.
space and the required cooktop hood fire suppression system. The smoke alarms are intended to notify staff who might not be in the immediate area. Smoke alarms should be maintained a minimum of 20 ft (6.1 m) away from the cooktop or range as studies have shown this distance to be the threshold for significantly reducing nuisance alarms caused by cooking. The intent of the interconnected smoke alarms, with silence feature, is that while the devices would alert staff members to a potential problem, if it is a nuisance alarm, the staff members can use the silence feature instead of disabling the alarm. The referenced study indicates that nuisance alarms are reduced with photoelectric smoke alarms. Providing two, interconnected alarms provides a safety factor since they are not electrically supervised by the fire alarm system. (Smoke Alarms – Pilot Study of Nuisance Alarms Associated with Cooking)

A.18.3.2.5.3(12) The provision of 18.3.2.5.3(12) recognizes that it is more important to maintain the 20-ft (6.1-m) minimum spacing criterion between the smoke alarm and the cooktop or range, to minimize nuisance alarms, than to assure that the smoke alarm is located within the kitchen area itself.

A.18.3.2.5.3(13) The requirements of 18.3.2.5.3(13) are intended to allow the local staff to silence and reset the system smoke detector without the assistance of the engineering or maintenance personnel. This provision is not intended to require the system smoke detector to initiate a building-wide occupant alarm signal or to notify the emergency forces.

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Issue Date: October 30, 2012
Effective Date: November 19, 2012

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/codelist)