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Executive Commissioner

Long-Term Care Regulation Technical Memorandum

Number: TM 2023-02

Title: Life Safety Code (LSC) Inspection, Testing, and Maintenance (ITM)

Provider Types: Assisted Living Facility (ALF)

TAC Reference: See Endnote¹

Date Issued: August 31, 2023

1.0 Subject and Purpose

This technical memorandum (TM) provides guidance on the interpretation of, and compliance with, the requirements for ITM of systems and equipment in ALFs as established in Texas Administrative Code, Title 26 (26 TAC), Chapter 553, Licensing Standards for Assisted Living Facilities.²

The guidance provided in this TM cannot address every unique requirement of every ALF. Compliance can only be evaluated based upon the particular on-site conditions in each situation. This TM applies only to the provisions of 26 TAC Subchapter D³ specifically addressed herein. It does not constitute a substantive change to any provision of those sections, nor does it address or modify any other rule in Chapter 553 or other legal requirement to which an ALF is subject, including requirements for approval by a local authority having jurisdiction (AHJ) for enforcement of its own standards.

2.0 Policy Details & Provider Responsibilities

The Licensing Standards for Assisted Living Facilities require ALFs to perform ITM of fire safety systems and other systems and equipment in an ALF for the safety of ALF residents. In certain instances, the ITM activities must be performed by qualified third parties.

The following sections of this document may not discuss every ITM requirement addressed in the ALF licensing standards or a referenced NFPA

standard. Even if an ITM requirement in the ALF licensing standards or a reference NFPA standard is not discussed in this document, an ALF must make sure all required ITM tasks and activities in rules or referenced codes and standards are performed.

Not every topic discussed in this document includes requirements for all three components of ITM. Some topics only have inspection requirements, only have testing requirements, only have maintenance requirements, or have some combination.

2.1 Local Fire Marshal Inspection

According to <u>26 TAC §553.104(a)</u>, an ALF must obtain a fire safety inspection from the local fire marshal at least once every 12 months. The ALF must correct any items cited by the local fire marshal to the satisfaction of the local fire marshal.

HHSC considers a fire marshal inspection to have occurred at least once every 12 months if the next inspection occurs by the end of the same month in the following year. For example, if an ALF has a fire marshal inspection on June 12, 2023, the next full fire marshal inspection must occur no later than the last day of June 2024, namely June 30, 2024.

HHSC does not recognize a follow-up inspection by a fire marshal as an annual inspection if the follow-up inspection is performed solely to determine whether items the fire marshal previously cited at the ALF have been corrected. If a fire marshal performs a complete inspection during a follow-up visit, HHSC will recognize the inspection as the fire marshal inspection for the year.

A local government may not have a fire marshal because there is no fire marshal position in that political subdivision. A local government may have a fire marshal position, but the position might currently be vacant. If there is no local fire marshal or the local fire marshal position is vacant, the <u>State Fire Marshal's Office (SFMO)</u> is the fire marshal for that location. The SFMO will not perform inspections in areas served by local governments with certified inspectors.

In most cases, only a person certified by the <u>Texas Commission on Fire Protection (TCFP)</u> as a fire inspector can conduct a fire safety inspection required by a state or local law, rule, regulation, or ordinance, including a fire safety inspection required by the ALF licensing standards.⁴

A fire marshal's office, including the SFMO, might charge a fee for conducting an inspection. If a fire marshal's office charges a fee an ALF is responsible for paying the fee to obtain the inspection.

A fire marshal's office might not regularly inspect an ALF. It is an ALF's responsibility to make sure the ALF requests an inspection by the fire marshal early enough to ensure the inspection can occur within 12 months of the last fire marshal inspection.

An ALF must keep documentation at the ALF that shows the outcome of the most recent annual fire marshal inspection. A fire marshal may give an ALF a letter or completed report about the date, time, and findings of the annual fire marshal inspection. If the SFMO or a local fire marshal does not issue a letter or report to an ALF, the ALF should request documentation. It is an ALF's responsibility to make sure the ALF receives documentation from the fire marshal.⁵

2.2 Fire Alarm System

According to <u>26 TAC §553.104(g)</u>, an ALF must make sure a fire alarm system is inspected, tested, and maintained according to NFPA 72, *National Fire Alarm and Signaling Code*.

NFPA 72, Chapter 14, covers the ITM of fire alarm systems and their components. The requirements of Chapter 14 apply to all fire alarm systems in an ALF, regardless of the age of the fire alarm system.

An ALF is responsible for making sure ITM required by NFPA 72 is performed. Specially qualified individuals are required to perform some of the ITM tasks required by NFPA 72.^Z An ALF is responsible for making sure individuals who perform ITM tasks are qualified to perform those tasks.

NFPA 72 describes procedures and schedules for performing different ITM tasks for fire alarm systems:

- Inspection—Visual inspections are performed to make sure there are no changes that will affect the performance of the fire alarm system.⁸
 - Section 14.3 in NFPA 72 describes the procedures and intervals between inspections. Some visual inspections are performed only when a fire alarm system is first installed or modified. Other visual inspections may be required at regular intervals throughout the life of the ALF.
- Testing—Testing is performed to verify the proper operation of fire alarm system devices, appliances, emergency control functions, and control equipment.
 - Section 14.4 in NFPA 72 describes the procedures and intervals between tests. Some tests are performed only when a fire alarm system is first installed or changed. Other tests may have to occur at regular intervals throughout the life of the ALF.
- Maintenance—Fire alarm system equipment must be maintained according to the manufacturer's published instructions. The frequency of maintenance tasks depends on the type of equipment and physical conditions at the ALF.
 - Section 14.5 in NFPA 72 discusses maintenance of fire alarm systems.

An ALF should keep permanent records of the initial approval of a fire alarm system by the local AHJ.

An ALF must keep documentation at the ALF about any ITM tasks performed on the fire alarm system during the current year. The documentation should be kept for at least two years after the next annual inspection and test.⁹

See section 2.11 of this document for guidance on the frequencies of ITM tasks for fire alarm systems required by NFPA 72.

2.3 Fire Sprinkler System¹⁰

According to <u>26 TAC §553.104(h)</u>, an ALF with a fire sprinkler system must make sure the ALF's fire sprinkler system is inspected, tested, and maintained according to NFPA 25, *Standard for the Inspection*, *Testing*, and *Maintenance of Water-Based Fire Protection Systems*.¹¹

NFPA 25 covers ITM of fire sprinkler systems and their components. NFPA 25 addresses ITM of fire sprinkler systems, as well as private fire service mains and private fire hydrants at ALFs that have these fire safety features. NFPA 25 also addresses water supplies, fire pumps, and valves that control fire sprinkler system water flow. The requirements of NFPA 25 apply to all fire sprinkler systems in ALFs, regardless of the age of the fire sprinkler system.

NFPA 25 does not ordinarily apply to fire sprinkler systems designed, installed, and maintained according to NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes.* However, a small ALF may have a fire sprinkler system meeting NFPA 13D, and the ALF licensing standards require all ALFs to inspect, test, and maintain any type of fire sprinkler system the ALF has, according to NFPA 25.¹²

An ALF is responsible for making sure ITM required by NFPA 25 is performed. Specially qualified individuals are required to perform some of the ITM tasks required by NFPA 25.¹³ An ALF is responsible for making sure individuals who perform ITM tasks are qualified to perform those tasks.

NFPA 25 describes procedures and schedules for performing different ITM tasks for fire sprinkler systems:

- ITM tasks for fire sprinkler systems are covered in NFPA 25, Chapter 5.¹⁴
 - Inspection—Visual inspections of fire sprinkler systems are performed to make sure there are no conditions that can impact the performance of the fire sprinkler system.
 - Section 5.2 in NFPA 25 describes the procedures and intervals between inspections of fire sprinkler systems. Some inspections are performed only when a fire sprinkler

- system is first installed or modified. Other inspections may be required at regular intervals throughout the life of the ALF.
- Testing—Testing of selected fire sprinklers is performed periodically to make sure the sprinkler still has the required sensitivity and functions as intended.
 - Section 5.3 in NFPA 25 describes the procedures and intervals between tests of fire sprinklers.
- Maintenance—Maintenance of fire sprinklers generally involves replacing fire sprinkler heads that no long pass inspection or testing.
 - Section 5.4 in NFPA 25 describes the procedures for maintaining fire sprinkler systems.
- ITM tasks for private service mains are covered in NFPA 25, Chapter 7.¹⁷
 - Inspection—Routine inspections are performed on private fire service mains piping that is exposed (not underground) and on certain components of underground piping that designed and installed to be readily accessible for inspection and operation, such as water control valves.
 - Section 7.2 in NFPA 25 describes the procedures and intervals between inspections of private fire service mains.
 - Testing—Underground and exposed piping is periodically tested to ensure water flow through the piping has not deteriorated over time, which could impair the operation of fire sprinkler systems and fire hydrants connected to the piping.
 - Section 7.3 in NFPA 25 describes the procedures and intervals between tests of private fire service mains.
 - Maintenance—Private fire service mains equipment and fire hydrants must be kept in working condition consistent with the manufacturer's recommendations.

Sections 7.4 and 7.5 in NFPA 25 describe the procedures and intervals between maintenance activities and actions for private fire service mains.

- ITM tasks for fire pumps are covered in NFPA 25, Chapter 8.¹⁸
 - Inspection—A fire pumps is inspected to confirm the pump appears to be in operating condition and is not physically damaged.
 - Section 8.2 in NFPA 25 describes the procedures and intervals between inspections of fire pumps.
 - Testing—Fire pumps are tested on a regular basis to ensure the fire pump will operate as intended when the fire protection systems it supports are activated. Testing of a fire pump should only be performed by facility personnel who know and understand how a fire pump is intended to work.
 - Section 8.3 in NFPA 25 describes the procedures and intervals between tests of fire pumps.
 - Maintenance—An ALF must have a preventative maintenance program for all components of a fire pump according to the manufacturer's recommendations and must make sure all required preventative maintenance and repairs are performed on a fire pump.
 - Section 8.5 in NFPA 25 describes the requirements for maintenance of fire pumps.

An ALF should retain permanent records of the initial approval of a fire sprinkler system by the local AHJ.

An ALF must keep documentation at the ALF about any ITM tasks performed on a fire sprinkler system, private fire service mains, or private fire hydrants, during the current year. The documentation should be kept for at least two years after the next annual ITM.¹⁹

See section 2.11 of this document for guidance on the frequencies of ITM tasks for fire sprinkler systems, private fire service mains, and private fire hydrants, required by NFPA 25.

2.4 Portable Fire Extinguishers²⁰

According to <u>26 TAC §553.104(i)</u>, an ALF must make sure portable fire extinguishers (PFEs) are inspected, tested, and maintained according to NFPA 10, *Standards for Portable Fire Extinguishers*.²¹

NFPA 10, Chapter 7, covers the ITM of PFEs. The requirements of Chapter 7 apply to all PFEs in ALFs, regardless of when the PFEs were placed in service in the ALF.

An ALF is responsible for making sure ITM required by NFPA 10 is performed. Specially qualified individuals must perform some of the ITM tasks required by NFPA 10.²² An ALF is responsible for making sure individuals who perform ITM tasks are qualified to perform those tasks.

NFPA 10 describes procedures and schedules for performing different ITM tasks for PFEs:

- Inspection—PFEs are inspected when they are initially placed in service.²³ PFEs are then regularly inspected at least monthly. Inspections should be performed more often under certain conditions at an ALF.²⁴
 - Section 7.2.2 in NFPA 10 describes the procedures for monthly PFE inspections, which are sometimes called "quick checks." A monthly PFE inspection can be performed by ALF staff who are knowledgeable about the monthly inspection requirements. Monthly inspections check at the least the following:
 - o The PFE is where it is supposed to be.
 - Visibility and access to the PFE are not blocked or obstructed.
 - The pressure gauge reading or indicator on the PFE is in the operable range or position.

An ALF must make sure any situations discovered during a monthly inspection are corrected as soon as they are discovered—PFEs are returned to their designated location or replaced; visibility and access to PFEs are not blocked; PFEs that have been discharged are recharged by qualified individuals or are replaced with working PFEs.

 Maintenance—All PFEs must have maintenance performed annually by qualified individuals.²⁵ Depending on how long the PFE has been in service the maintenance might include hydrostatic testing or internal examination of the interior of the pressure cylinder.

Section 7.3 in NFPA 10 describes the procedures and intervals between required maintenance of PFEs.

An ALF must keep documentation at the ALF about any ITM tasks performed on PFEs.²⁶ The documentation should be kept for at least two years after the next annual inspection and test.

See section 2.11 of this document for guidance on the frequencies of ITM tasks for PFEs required by NFPA 10.

2.5 Gas Pressure Test

According to 26 TAC §553.104(o), an ALF that has appliances that use natural gas or liquid petroleum gas (LPG), also known as propane, as a fuel for heating or cooking, must obtain a pressure test of gas piping between the gas meter or propane storage tank and any gas-fired appliances when the gas piping and appliances are first installed. An initial gas pressure test is not required when a new small ALF with gas piping and gas-fired appliances or a new large Type A ALF with gas piping and gas-fired appliances is created through conversion²⁷ if no changes are made in the gas piping and no new gas-fired appliances are installed as part of the conversion.

An ALF must also obtain a gas pressure test when gas-fired appliances are added or replaced and when gas piping is modified, repaired, or extended.

A gas pressure test is performed to identify any design flaws or any weakness in the pipe, fittings or joints, before gas is introduced to the pipe. The procedures for a gas pressure test are outlined in NFPA 54 and NFPA 58. A local AHJ might have additional requirements for a gas pressure test based on their adopted codes, standards, or ordinances. A local AHJ may require an individual who performs a gas pressure test to have a specific credential or experience. An ALF is responsible for ensuring that the ALF has a gas pressure test performed by a

qualified individual and according to NFPA 54, NFPA 58 and any additional requirements of the AHJ for the community where the ALF is located.

2.6 Annual Gas Heating Equipment Check

According to 26 TAC §553.104(p), an ALF that has heating equipment that burns natural gas or LPG to heat air in the facility for the comfort of building occupants must check the heating equipment for proper operation before the heating season begins. Each ALF experiences different weather patterns, including the onset of cold weather. An ALF must decide when the best time is for that ALF to perform an annual gas heating check to ensure the ALF's gas heating equipment is working safely and will work when heating is needed. Regardless of the date of the gas heating equipment check, an ALF must perform a gas heating equipment check at least once each year.

Gas heating equipment may include gas furnaces, gas space heaters and unit heaters, and gas-fired boilers that produce hot water or steam for heating building heating.

An ALF that must perform gas heating system checks must keep records showing the gas heating equipment was checked during the last year. The documentation should be kept for at least two years after the next annual inspection and test. The records should include the date the check was performed and who performed the check.

2.7 Emergency or Standby Generator

According to 26 TAC §553.104(q), a large ALF that uses an emergency generator to provide back-up power for emergency lighting must make sure the emergency generator is inspected, tested, and maintained according to NFPA 110, Standard for Emergency and Standby Power Systems.²⁸

A large ALF that has a generator but does not rely on the generator to provide back-up power for emergency lighting does not have to perform ITM on the generator according to NFPA 110. A large ALF with a generator that is not used to supply back-up power for emergency lighting should determine, based on the ALFs needs, how the ALF will inspect, test and maintain a generator.²⁹

Small ALFs do not have to have emergency lighting. This means that a small ALF that has a generator does not have to perform ITM tasks on the generator. A small ALF with a generator should decide, based on the ALFs needs, how the ALF will inspect, test and maintain a generator.³⁰

NFPA 110, Chapter 8, covers the ITM of emergency and standby generators. A large ALF that uses an emergency generator to provide back-up power for emergency lighting is responsible for making sure ITM required by NFPA 110 is performed.

Routine maintenance and operational testing of a generator is based on the manufacturer's recommendations, generator instruction manuals, and the requirements of NFPA 110, Chapter 8.

NFPA 110 describes procedures and schedules for performing different ITM tasks for an emergency or standby generator:

 Inspection—Emergency power systems, including a generator and other components such as electrical switch gear and automatic or manual transfer switches, must be inspected weekly. A generator does not have to be run during a weekly inspection.³²

Because every ALF and every generator installation is different, there are no fixed requirements for how to perform an inspection of a generator or what to inspect a generator for. At the very least, an ALF should refer to the generator manufacturer's recommendations and instruction manuals to decide how the ALF's generator should be inspected. 33

Testing

 Monthly starting battery test. A generator starting battery must be tested monthly. Batteries must be tested to make sure the battery produces the proper voltage to reliably start the generator, based on the generator manufacturer's recommendations.

For a lead-acid battery that is not permanently sealed:

- The electrolyte level must be checked.
- The specific gravity of the electrolyte must be tested.

o Monthly generator operational test. A generator must be run from a cold start under load monthly. This operational test should be performed by transferring power from the normal utility power source to the generator at an automatic transfer switch. The operational test for a generator that uses gasoline, natural gas, or LPG as a fuel is different than the operational test for a generator that uses diesel as a fuel. 46

An operational test tests not only the generator itself, but transfer switches and devices, such as emergency lighting, that are connected to the emergency power system. An ALF should refer to the manufacturer's recommendations and instruction manuals for guidance on how to test the ALF's generator and transfer switches. An operational test simulates a power outage, which can be done by using the test switch on an automatic transfer switch.

An ALF can decide what date and time of day each month that the ALF wants to perform a monthly operational test. The monthly operational test does not have to be performed on the same day or at the same time each month.

- Monthly transfer switch operational test. A transfer switch must be exercised at least once per month by switching the transfer switch from the standard position—connected to normal power—to the alternate position—connected to the generator—and then returning the transfer switch to the standard position.
- Three-year test. A generator must be run continuously from a cold start under load at least once every three years for a duration of at least 90 minutes, and up to four hours depending on how the ALF intends to use the generator. A three-year test can end after four hours even if the ALF intends to rely on the generator for a longer period in an emergency.³⁷

Just as with an operational test, a three-year test for a generator that uses gasoline, natural gas or LPG as a fuel³⁸

is different than the operational test for a generator that uses diesel as a fuel.³⁹

A three-year test can be combined with a regularly scheduled monthly test.⁴⁰

 Maintenance—Routine maintenance of generators and associated equipment should be based on the generator manufacturer's recommendations and the equipment instruction manuals.

Generators are built around an engine and need the same types of routine maintenance as the engines in vehicles. Other components that are part of an emergency power system require their own regular maintenance. Generator starting batteries may require maintenance. An ALF should consider stocking spare parts for a generator based on the recommendations of the generator manufacturer. An ALF should consider how it will supply emergency power to emergency lighting and other systems or equipment when a generator is out of service. 41

A large ALF that uses an emergency generator to supply back-up power for emergency lighting must keep good records about the ITM of the generator. An ALF should keep records of inspection and testing long enough to show a consistent pattern of compliance. The generator ITM records must be kept at the ALF.42

- An ALF must record the date and time of a weekly inspection and who performed the inspection. An ALF should keep records of weekly inspections for at least two years.
- An ALF must record the date and time of a monthly generator starting battery test and who performed the battery test. The measured battery voltage should be recorded. For lead-acid batteries that are not permanently sealed, the level of the electrolyte and the specific gravity of the electrolyte should be recorded. An ALF should keep records of monthly battery tests for at least two years.

- An ALF must record the date and time of a monthly generator operational test and who performed the test.⁴³ An ALF should keep records of monthly generator operational tests for at least two years.
- An ALF must record the date and time of a monthly transfer switch test and who performed the test. An ALF should keep records of monthly transfer switch tests for at least two years.
- An ALF must record the date and time of a three-year test and who performed the test. The records for a three-year test should include the load in kilowatts that the generator was operated with and for how long the generator was continuously operated. An ALF should keep records of at least the last two three-year test.
- An ALF must keep permanent records on maintenance and repairs to generators. A maintenance report or repair report must include the following:⁴⁴
 - The date of the report and the date the maintenance or repair was performed;
 - Who performed the maintenance or repair service;
 - Notes about any unsatisfactory conditions and the actions that were taken to correct the issue, including listing any parts that were replaced; and
 - If testing of a repair was recommended by the manufacturer, whether the testing was performed and for how long.

An ALF must keep repair and maintenance records for as long as the generator is in service at the ALF.

2.8 Cooking Operations

Depending on the type—Type A or Type B—and the size of an ALF—small or large—an ALF may have to perform ITM of equipment and systems used in the ALF's cooking operation according to the requirements of NFPA 96.45

An ALF must ensure ITM of any equipment or systems that must meet the ITM requirements of NFPA 96, which may include ITM on exhaust and ventilation control systems and equipment, and fire protection systems and equipment, is performed on a regular basis.

ITM tasks on a fixed extinguishment system installed in a range hood must be performed semiannually by a person licensed by the SFMO to perform the work. Other ITM tasks, such as maintenance and cleaning of range hoods, must be performed by knowledgeable individuals, but no special license is required.

HHSC does not require an ALF to have a contract with a company to perform ITM services on kitchen exhaust and fire protection systems. An ALF can hire qualified persons to perform this work, as needed, as long as the work is performed at the frequencies required by NFPA 96.

NFPA 96 describes procedures and schedules for performing different ITM tasks for cooking operations:

- Inspection—The entire exhaust system must be inspected for grease buildup by a trained and qualified person at least every semiannually, and more often in an ALF where more intensive cooking is occurring, such as cooking with solid fuel, charbroiling, or wok cooking.
- Maintenance—Maintenance of exhaust hoods and fireextinguishing systems in exhaust hoods must be performed by trained, qualified, and certified persons⁴⁷ at least semiannually.⁴⁸ Some components of the fire-extinguishing system are considered expendable and may have to be cleaned or replaced every year.

If inspection of the exhaust system finds the system is contaminated with deposits of grease, the exhaust system must be cleaned by trained persons.

When an ALF performs the inspection and cleans the exhaust system, the ALF should document in writing when the inspection and cleaning was performed. An ALF might not have trained staff or the equipment necessary to inspect and clean the exhaust system.

When an ALF hires an exhaust cleaning service to inspect and clean the exhaust system, the facility must obtain a certificate showing the name of the servicing company, the name of the person performing the work, and the date the inspection or cleaning was performed. The exhaust cleaning company should provide the ALF with a report that specifies any areas in the exhaust system that the company could not access or did not clean. The documentation should be kept for at least two years after the next annual inspection and test.

2.9 Elevators

According to NFPA 101, elevators in the following occupancies must meet safety codes for elevators: 49

- new small residential board and care occupancies
- existing and new large residential board and care occupancies
- existing and new health care occupancies

NFPA 101 refers to two standards published by the American Society of Mechanical Engineers (ASME):

- ASME A17.1, Safety Code for Elevators and Escalators
- ASME A17.3, Safety Code for Existing Elevators and Escalators

The <u>Texas Department of Licensing and Regulation (TDLR) Elevators</u>, <u>Escalators and Related Equipment Safety and Licensing program</u>, requires elevator equipment to be inspected and certified to the same standards on an annual basis.⁵⁰

Since ALFs must comply with all applicable state and local laws, codes, or ordinances, HHSC accepts an elevator Certificate of Compliance issued by the TDLR Elevators, Escalators and Related Equipment Safety and Licensing program as evidence of compliance with elevator safety requirements in NFPA 101.

An ALF should contact the <u>TDLR Elevators</u>, <u>Escalators and Related</u> <u>Equipment Safety and Licensing program</u> with any questions about elevator safety or TDLR Elevators, Escalators and Related Equipment Safety and Licensing program procedures and rules.

2.10 Boilers 51

The TDLR Boilers and Boiler Safety program protects Texans through the safe operation and frequent inspection of boilers under the authority of the Texas Boiler Law.⁵²

An ALF must comply with other state and local laws, code, or ordinances, 53 including the Texas Boiler Law. If an ALF has a boiler, the ALF must comply with the Texas Boiler Law.

An ALF should contact the <u>TDLR Boilers and Boiler Safety program</u> with any questions about boilers, boiler safety or TDLR Boiler and Boiler Safety program procedures and rules.

2.11 Frequency of ITM Tasks

Unless specifically discussed in another section of this document, HHSC understands the following frequencies between ITM activities to have the meaning in the following table.

Frequency	Meaning
Daily	Occurring every day
Weekly	Occurring fifty-two times per year,
	between Sunday and the following
	Saturday
Monthly	Occurring twelve times per year, with a
	minimum of 3 weeks and a maximum of
	5 weeks between each occurrence
Quarterly	Occurring four times per year, with a
	minimum of 2 months and a maximum of
	4 months between each occurrence
Semiannually	Occurring two times per year, with a
	minimum of 4 months and a maximum of
	8 months between each occurrence
Annually	Occurring once per year, with a minimum
	of 9 months and a maximum of 15
	months between each occurrence.
Every	Occurring no later than the end of the
[two/three/four/five/six]	same month [two/three/four/five/six]
years	years after the last occurrence. For
	example, an activity that must occur
	every five years beginning June 12,

2023, must next be completed by June
30, 2023.

3.0 Background/History

Health and Safety Code §247.0263 requires HHSC to provide "guidance on the interpretation of minimum life safety code standards" prescribed under Health and Safety Code, Chapter 247, Assisted Living Facilities, and ALF rules, in 26 TAC Chapter 553. The statute requires a TM to be published at least twice a year. The statute requires surveyors to use the interpretation in a TM to assess an ALF's compliance with the requirements referenced in the TM.

4.0 Resources

TM 2022-02, Protection of Cooking Operations in Small Type A, Small Type B, and Large Type A ALFs

TM 2023-01, Protection of Cooking Operations in Large Type B ALFs

5.0 Contact Information

Endnote References:

¹ All references to Texas Administrative Code, Title 26, Part 1, Chapter 553, Licensing Standards for Assisted Living Facilities, can be viewed at the Texas Office of the Secretary of State website.

Relating to all ALFs:

- 26 TAC §553.101(3), definition of auxiliary serving kitchen
- 26 TAC §553.101(12), definition of independent cooking equipment
- <u>26 TAC §553.101(13)</u>, definition of living unit
- 26 TAC §553.101(14), definition of neighborhood or household
- 26 TAC §553.101(24), definition of NFPA 96

Relating to existing large Type B ALFs:

- <u>26 TAC §553.142(o)</u>, kitchens, other than a kitchen serving a neighborhood or household, must meet <u>§553.146(c)</u>
- <u>26 TAC §553.143(c)(2)</u>, doors to living units with independent cooking equipment must be self-closing or automatic-closing
- <u>26 TAC §553.145(a)(2)(B)</u>, additional smoke detection and heat detection in living unit with independent cooking equipment
- <u>26 TAC §553.146(c)</u>, protection of cooking operations not located in an individual resident living unit

Relating to new large Type B ALFs:

- <u>26 TAC §553.242(o)</u>, kitchens must meet <u>§553.246(c)</u>
- 26 TAC §553.243(b)(2), doors to living units with independent cooking equipment must be self-closing or automatic-closing
- <u>26 TAC §553.245(a)(2)(B)</u>, additional smoke detection and heat detection in living unit with independent cooking equipment
- <u>26 TAC §553.246(c)</u>, protection of any cooking operation not located in an individual resident living unit
- ² See endnote 1.
- ³ See endnote 1.
- ⁴ Texas Government Code, Sec. 419.909. Fire Safety Inspection.

An ALF must make sure the person who performs a fire marshal inspection is certified as a fire inspector by TCFP. An ALF can search the TFCP certification database for a fire department or an individual to determine whether the individual has one of the following credentials:

- Basic inspector
- Intermediate inspector
- Advanced inspector
- Master
- ⁵ See <u>26 TAC §553.104(a)(2)</u>.
- NFPA 72, National Fire Alarm and Signaling Code, 2011 edition
 National Fire Protection Association (NFPA)
 1 Batterymarch Park
 Quincy, Massachusetts 02169-7471

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- ² In Texas, the planning, certification, installation, servicing, monitoring, and maintenance of fire alarm systems and devices must be performed by a person employed by a company registered with the SFMO and licensed by the SFMO to perform the work.
 - An ALF can look up companies and individuals registered and licensed by the SFMO <u>online</u>.
- The performance of fire alarm system equipment can be affected by building modifications, changes in environmental conditions, device location, physical obstructions, device orientation, physical damage, improper installation, degree of cleanliness, or other obvious problems that might not otherwise be detected.

⁹ See <u>26 TAC §553.104(q)(8)-(9)</u>.

Depending on the age of an ALF—existing or new, its type—Type A or Type B, and its size—large or small, an ALF can have a fire sprinkler system meeting one of three different fire sprinkler system installation standards.

An older ALF might not have a fire sprinkler system.

- Prior to August 31, 2021, the licensing standards for assisted living facilities allowed existing hospitals and nursing facilities, some of did not have to have fire sprinkler systems, to convert to ALFs without installing additional fire safety features.
- In addition, small Type A ALFs licensed before January 6, 2014, did not have to have fire sprinkler systems according to the licensing standards for small Type A ALFs before that date.

A limited number of existing ALFs were licensed using these options and do not have fire sprinkler systems.

A small ALF with a fire sprinkler system might have a fire sprinkler system installed according to one of three different fire sprinkler installation standards:

- NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height
- NFPA 13, Standard for the Installation of Sprinkler Systems

An existing large Type A ALF—one licensed before August 31, 2021—with a fire sprinkler system, could have a fire sprinkler system meeting one of two different fire sprinkler installation standards:

- NFPA 13R
- NFPA 13

A new large Type A ALF, or parts of an existing large Type A ALF, constructed and licensed on or after August 31, 2021, must have a fire sprinkler system meeting NFPA 13.

An existing large Type B ALF with a fire sprinkler system must have a fire sprinkler system meeting NFPA 13.

A new large Type B ALF must have a fire sprinkler system meeting NFPA 13.

NFPA 72, National Fire Alarm and Signaling Code, 2011 edition
 National Fire Protection Association (NFPA)
 1 Batterymarch Park
 Quincy, Massachusetts 02169-7471

See <u>endnote 6</u> for information on how to access NFPA standards online at no cost.

¹² See 26 TAC §553.104(h).

NFPA 101, *Life Safety Code*, 2012 edition, references specific ITM tasks in NFPA 25 when a small residential board and care occupancy has an NFPA 13D fire sprinkler system. Small Type A and small Type B ALFs are small residential board and care occupancies and may have an NFPA 13D fire sprinkler system.

Because the ALF licensing standards require compliance with all the requirements of NFPA 25, the provisions in NFPA 101, 32.2.3.5.8 (for new small ALFs) and 33.2.3.5.8 (for existing small ALFs) do not apply.

- In Texas, the planning, installation, servicing, and maintenance of fire protection sprinkler systems must be performed by a person employed by a company registered with the SFMO and licensed by the SFMO to perform the work.
 - An ALF can look up companies and individuals registered and licensed by the SFMO <u>online</u>.
- ¹⁴ A fire sprinkler system is an integrated system of underground and overhead piping designed according to fire protection engineering standards.

A fire sprinkler system has at least one automatic water supply that supplies one or more fire systems. The part of the sprinkler system above ground is a network of specially sized piping installed in a building, generally overhead, to which sprinklers are attached in a systematic pattern.

A fire sprinkler system has one or more control valves in the supply piping. Each fire sprinkler system includes a device for actuating the fire alarm when the fire sprinkler system is activated. A fire sprinkler system is usually activated by heat from a fire and discharges water over the fire area.

- Individual fire sprinklers should not show signs of leakage, corrosion, foreign materials or paint on the sprinkler, and physical damage to the sprinkler. Sprinklers that show signs of leakage, corrosion, physical damage, loss of fluid in the glass bulb heat responsive element, loading with dust and other foreign materials, or painting (unless painted by the sprinkler manufacturer), must be replaced.
 - Minimum clearance around sprinklers, as required by the relevant fire sprinkler installation standard, must be maintained.
 - An ALF must maintain a supply of the correct number and type of spare sprinklers and any sprinkler wrenches required for each type of spare sprinkler.
- A representative sample of fire sprinklers installed in an ALF must be sent to a qualified third-party testing laboratory for testing after a specific number of years in service, depending on the type of fire sprinkler and the environment it is installed in. Sprinklers that have been in service for many years should not be expected to perform the same as a new sprinkler of the same type.
 - In lieu of sending sprinklers to a lab for testing, older sprinklers can just be replaced. However, sending a representative sample for testing can be more cost effective because testing may show the sprinklers are still performing as intended.
- A private fire service main is the piping and other components on the ALF's property, usually underground, that connects a source of water to the ALF's fire sprinkler system or to a fire hydrant on the ALF's property and under control of the ALF.

- A fire pump is a pump that supplies liquid flow and pressure dedicated to fire protection through a fire sprinkler system, private fire mains or fire hydrants.
 - Fire sprinkler systems in small ALFs that have a fire sprinkler system meeting NFPA 13D may have a pump installed in the sprinkler piping. NFPA 13D sprinkler systems are often by an on-site water tank or the domestic water supply that also serves kitchen and bathroom fixtures. These pumps are not "fire pumps" according to NFPA 25 and are do not have to be inspected, tested or maintained according to NFPA 25.
- ¹⁹ See 26 TAC §553.104(h)(8)-(9).
- A PFE is a portable device, carried or on wheels, that is operated by hand. A PFE contains an extinguishing agent that can be expelled under pressure for the purpose of suppressing or extinguishing a fire.
 - Extinguishment and suppression systems that are not portable, such as fire sprinkler systems or systems that are installed in kitchen hoods, are not PFEs.
 - ITM for fire sprinkler systems is addressed in section 2.3 of this document.
 - ITM for fixed extinguishment systems used in cooking operations are addressed in section 2.8 of this document.
- NFPA 10, Standard for Portable Fire Extinguishers, 2010 edition
 National Fire Protection Association (NFPA)
 1 Batterymarch Park
 Quincy, Massachusetts 02169-7471
 - See endnote 6 for information on how to access NFPA standards online at no cost.
- In Texas, the planning, installation, servicing, and maintenance of fire protection sprinkler systems must be performed by a person employed by a company registered with the SFMO and licensed by the SFMO to perform the work.

An ALF can look up companies and individuals registered and licensed by the SFMO online.

- If an ALF gets a PFE from a fire extinguisher service company the company will probably affix a tag to the PFE that shows the date the PFE was placed in service. These tags are sometimes called "installation tags" and usually have a place on the back of the tag where an ALF can document the month and day the ALF performed a monthly inspection.
- Inspections of PFEs should occur more often than once per month if any of the following conditions exist at an ALF:
 - There is a high frequency of fires at the ALF in the past
 - PFEs at the ALF are subject to tampering or vandalism
 - There is a possibility or history of PFEs being stolen at the ALF
 - PFEs are located in the ALF where the can be subject to physical damage
 - Where there is a possibility that PFEs at the ALF are obstructed from view or where access to PFEs is likely to be blocked by furniture or equipment
 - PFEs are exposed to extreme heat or cold (especially if located in parts of the ALF that are not heated or cooled, or if located outdoors) or to corrosive environments such as central laundry facilities or indoor swimming pools
- In Texas, the servicing and maintenance of PFEs must be performed by a person employed by a company registered with the SFMO and licensed by the SFMO to perform the work.
 - An ALF can look up companies and individuals registered and licensed by the SFMO online.
- ²⁶ See 26 TAC §553.104(i)(2)(C).
- See <u>26 TAC §553.101(7)</u>. A new large Type B ALF cannot be created through conversion.
- NFPA 110, Standard for Emergency and Standby Power Systems, 2011 edition
 - National Fire Protection Association (NFPA)

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See <u>endnote 6</u> for information on how to access NFPA standards online at no cost.

- Even though a large ALF may not have to perform ITM on a generator because it does not provide backup power for emergency lighting, HHSC recommends that any large ALF with a generator follow NFPA 110, Chapter 8, in setting up the facility's own program for routine maintenance and operational testing of the generator.
- Even though a small ALF with a generator does not have to perform ITM on the generator, HHSC recommends that any small ALF with a generator follow NFPA 110, Chapter 8, in setting up the facility's own program for routine maintenance and operational testing of the generator.
- The terminology used in NFPA 110 can be confusing. NFPA 110 refers to an EPS and to an EPSS. These acronyms refer to two different things. Emergency power supply (EPS) refers to the source of electric power for an emergency power supply system. An EPS is all the components of a generator, combined.
 - Emergency power supply system (EPSS) refers to an EPS and all the facility wiring, electrical distribution, transfer switches, and control, supervisory and support devices, needed to supply a source of emergency power that is safe and reliable. Essentially, an EPSS is the complete system that sits between the source of normal utility power and devices that are powered by the EPS.
- See NFPA 110, 8.4, Operational Inspection and Testing.

 Even though a generator does not have to run during a weekly inspection there may be advantages to running a generator for a short period each week to reduce the potential for build-up of unburned fuel or carbon in the exhaust system of the generator.
- At the very least, an ALF should consider the recommendations in Figure A.8.3.1(a), Suggested Maintenance Schedule for Emergency Power Supply Systems (EPSSs), in Annex A of NFPA 110, when setting up the

ALF's generator inspection program. Annex A is not part of the requirements of NFPA 110 but is included for explanatory material.

- A generator might be able to automatically perform a monthly starter battery test.
- 35 See NFPA 110, 8.4.2.4.

For spark-ignited generators—generators that use fuels other than diesel—an operational test involves operating the generator at the available load for 30 minutes <u>or</u> until the water temperature and the oil pressure have stabilized.

There may be a benefit to periodically running a "load bank" test on a spark-ignited generator, as discussed in <u>endnote 36</u>. However, NFPA 110 does not require a load bank test for a spark-ignited generator.

36 See NFPA 110, 8.4.2 and 8.4.2.3.

For diesel generators, an operational test involves:

- 1. Running the generator for at least 30 minutes with a load that maintains the minimum exhaust temperature recommended by the generator manufacturer; or
- 2. Running the generator for at least 30 minutes at the full normal operation temperature with a load of at least 30 percent of the kilowatt (kW) rating on the generator's nameplate.

If it is not possible to run a diesel generator monthly under either option 1 or 2 above, an operational test involves:

- Running the generator for at least 30 minutes with the available load;
 and
- Performing a "load bank" test once a year.

A load bank test involves hiring a third-party to bring an artificial loading device to the ALF and running the generator at different percentages of load—30 continuous minutes at 50 percent of the kW rating on the generator's nameplate and one hour at 75 percent of the kW rating on the generator's nameplate.

Depending on the capacity of a diesel-fueled generator the cost of a load bank test can be substantial. A load bank test is only required

when it is not possible to perform a monthly operation test that satisfies the requirements of option 1 or 2 above.

37 NFPA 110 classifies an EPSS (see endnote 31) based on the capacity, reliability and quality of power to loads for a length of time and within a specific time following the loss of power from the normal power supply. See NFPA 110, Chapter 4.

NFPA 110 classifies an EPSS intended to automatically supply illumination (emergency lighting) when the normal power supply fails as a "Level 1" system. See NFPA 110, 4.4.1.

A large ALF must make sure emergency lighting will operate continuously for 90 minutes. NFPA 110 classifies an EPSS that will operate continuously for at least 90 minutes (1.5 hours) as a "Class 1.5" EPSS. See NFPA 110, Table 4.1(a) Classification of EPSSs.

If an ALF only uses a generator to power emergency lighting, the duration of a three-year test can be as little as 1.5 hours (90 minutes). See NFPA 110, 8.4.9.1.

ALFs with generators often use a generator to supply power to other systems and devices and may choose to assign a longer operating duration, or Class, to a generator. When an ALF assigns a longer Class to a generator, the ALF only has to operate the generator for a maximum of four hours during a three-year test. See NFPA 110, 8.4.9.2.

An ALF can always choose to perform a three-year test for a longer duration than 90 minutes or four hours. However, an ALF should consider the quantity of fuel the generator will use during the test. An ALF that has a generator that uses an on-site fuel supply, such as gasoline, LPG or diesel, will probably need to replace the fuel used after the test has been performed.

38 See NFPA 110, 8.4.9.5.3

A three-year test for spark-ignited generator involves running the generator for the period determined by the ALF with the available load by operating at least one transfer switch.

39 See NFPA 110, 8.4.9.5.1 and 8.4.9.5.2

A three-year test for a diesel generator involves running the generator for the period determined by the ALF with a load of at least 30 percent of the kW rating on the generator's nameplate that also maintains the minimum exhaust gas temperature recommend by the generator's manufacturer.

Depending on the size of a diesel-fueled generator it could be necessary to apply an artificial load to achieve a load of at least 30 percent of the kW rating on the generator's nameplate.

An annual load bank test, where required, can be used as the three-year test if the generator is operated for three continuous hours at 30 percent of the kW rating on the generator's nameplate and one hour at 75 percent of the kW rating on the generator's nameplate, for a total of four continuous hours. See NFPA 110, 9.4.9.7, for more information.

- 40 See NFPA 110, 8.4.9.6.
- A large ALF must have emergency lighting that works all the time. If a generator is the only source of emergency power for emergency lighting, and the generator is not in service, an ALF does not have emergency lighting and is not in compliance with the ALF licensing standards.
- 42 Annex A to NFPA 110 includes some valuable resources that an ALF can use as the basis for the ALF's generator ITM program and ITM recordkeeping program.
 - Figure A.8.3.1(b) in Annex A to NFPA 110 is a sample maintenance log for routine maintenance, operation and testing.
 - Figure A.8.4.1(a) in Annex A to NFPA 110 is a sample operating and testing log for the engine in a generator, also known as the "rotating equipment."
 - Figure A.8.4.1(b) in Annex A to NFPA 110 is a list of suggested operation and testing procedures.
- If an ALF with a diesel-fueled generator must run an annual load bank test (see endnote 36), the ALF should record the date and time of the load bank test and who performed the test. An ALF should keep records of a required load bank test for at least two years.

- 44 NFPA 110, 8.3.4.1.
- See TM 2022-02, Protection of Cooking Operations in Small Type A, Small Type B, and Large Type A ALFs, and TM 2023-01, Protection of Cooking Operations in Large Type B ALFs, for further guidance on when ITM requirements in NFPA 96 apply to an ALF.
- 46 See NFPA 96, 11.4, which references Table 11.4, included below:

NFPA 96, Table 11.4, Schedule of Inspection for Grease Buildup

Type or Volume of Cooking	Inspection Frequency
Systems serving solid fuel cooking	Monthly
operations	
Systems serving high-volume	Quarterly
cooking operations, such as 24-hour	
cooking, charbroiling, or wok	
cooking	
Systems serving moderate-volume	Semiannually
cooking operations	
Systems serving low-volume	Annually
cooking operations, such as	
churches, day camps, seasonal	
business, or senior centers	

- In Texas, the planning, certification, installation, and servicing, of fixed fire extinguisher systems, such as a fire-extinguishing system installed in a range hood, must be performed by a person employed by a company registered with the SFMO and licensed by the SFMO to perform the work. An ALF can look up companies and individuals registered and licensed by the SFMO online.
- 48 See NFPA 96, 11.2.
- Existing small Type A ALFs and existing small type ALFs are existing small residential board and care occupancies. Existing small residential board and care occupancies do not have to make sure ITM is performed on

elevators in those occupancies. Therefore existing small Type A and existing small Type B ALFs do not have to maintain records of ITM for elevators in those facilities to meet the ALF licensing standards. However, TDLR may require elevators in those facilities to be inspected to meet the requirements of the TDLR Elevators, Escalators and Related Equipment Safety and Licensing Program.

New small Type A ALFs and new small Type B ALFs are new small residential board and care occupancies. Elevators in new small ALFs must comply with ASME A17.1 or ASME A17.3 (see NFPA 101, 32.2.5.3). HHSC accepts certification by the TDLR Elevators, Escalators and Related Equipment Safety and Licensing Program as evidence of compliance with those standards.

Large Type A ALFs are large residential board and care occupancies. Elevators in large Type A ALFs must comply with ASME A17.1 or ASME A17.3 (see NFPA 101, 32.3.6.3 for new large Type A ALFs; see NFPA 101, 33.3.6.3) for existing large Type A ALFs). HHSC accepts certification by the TDLR Elevators, Escalators and Related Equipment Safety and Licensing Program as evidence of compliance with those standards.

Large Type B ALFs are health care occupancies. Elevators in large Type B ALFs must comply with ASME A17.1 or ASME A17.3 (see NFPA 101, 18.5.3 for new large Type B ALFs; see NFPA 101, 19.5.3 for existing large Type B ALFs). HHSC accepts certification by the TDLR Elevators, Escalators and Related Equipment Safety and Licensing Program as evidence of compliance with those standards.

- The owner of an elevator or related equipment must obtain an inspection every 12 months, unless TDLR permits a delay in an inspection or waives an inspection requirement. The building owner must submit the inspection report, all required documents, and applicable fees to TDLR to obtain an elevator Certificate of Compliance.
 - TDLR credentials elevator inspectors. An ALF can find an elevator inspector registered by TDLR online.
- Type of boilers that may be found in an ALF include heating boilers, which produce steam or hot water for heating, and water heaters, which produce hot water for domestic use.

⁵² The Texas Boiler Law is codified in Chapter 755 of the Texas Health and Safety Code.

⁵³ See 26 TAC §553.100(g).