December 31, 2019

The Honorable Greg Abbott
The Honorable Dan Patrick
The Honorable Dennis Bonnen

Dear Governor Abbott, Governor Patrick, and Speaker Bonnen:

The Texas Government Code requires the State Fire Marshal’s Office to submit an annual report regarding the State Fire Marshal’s findings in conducting inspections. Attached is the State Fire Marshal’s 2019 Annual Report Regarding Findings in Conducting Life Safety Inspections.

Please contact either me or Libby Elliott, Director of Government Relations, at 512-676-6605, if you have any questions or need any additional information about this report.

Respectfully submitted,

Orlando P. Hernandez
State Fire Marshal

cc: Senate Business and Commerce Committee
    House Insurance Committee
Executive Summary

The State Fire Marshal’s Office (SFMO) conducts life safety inspections of state-owned and state-leased buildings. The SFMO also performs fee-based fireworks retail site and complaint inspections. The requirements for these inspections are listed in the Texas Government Code, Section 417.008.

In Fiscal Year 19, the SFMO inspected 527 state-owned and state-leased properties, which included 3,512 buildings.

In FY19, the SFMO also conducted fee-based, fireworks retail site and complaint inspections for 1,939 buildings.

The SFMO has 15 fire inspectors, with one inspector dedicated to the Capitol Complex. Due to staffing vacancies, the SFMO averaged 12 inspectors for FY19.

SFMO inspections of state facilities are conducted on a risk analysis basis in consultation with the Texas Facilities Commission (TFC) and the State Office of Risk Management (SORM). The SFMO also works with all state agencies to prioritize facility inspections and identify deficiencies that pose the most significant risks.

Key Violations During Inspections

- Fire alarm, fire sprinkler, and commercial kitchen suppression systems are not maintained to fire code.
- New construction projects and building purchases by state agencies are not reported to the SFMO.
- Extension cords and power strips are used as permanent electrical wiring.
- Firewalls and smoke barriers have unsealed penetrations.
- Agencies with large cooking operations had steam kettles in their kitchens. The steam kettles are used as fryers and produce grease-laden vapors. Kitchens that use steam kettles as fryers must have an automatic fire suppression system.

According to many state entities, lack of funding affects their ability to quickly correct fire code violations.
Agency and State Building Reports

General State Building Inspection Data

State buildings inspected: 3,512
Violations found: 9,415
Violations corrected in FY 19: 1,851

Operational Goals

- Areas that provide residential and patient care, such as state-supported living centers and state hospitals, will be inspected each year.
- Buildings that are seven stories or higher will be inspected every two years.
- All residential facilities of any state agency will be inspected every two years.
- All state criminal justice facilities will be inspected every two years.
- The SFMO aims to inspect all other state-owned and leased facilities every three to five years.
- Inspectors will verify that fire drills occur regularly at all state-operated facilities.
- The SFMO will continue to request plans for future building and construction projects and provide peer reviews of them.

Texas Department of Criminal Justice (TDCJ)

Buildings inspected: 759
Violations found: 2,925
Violations corrected in FY 19: 167

Inspection Violations

- Most of the units’ fire alarm systems are non-functional. The SFMO has asked for correction timelines but has received none.
- Most of the units’ kitchen hood suppression systems aren’t inspected or maintained.
  - To keep the kitchens open and operating, the SFMO developed a fire watch policy.
  - TDCJ has failed to follow this policy.
- Many employee housing units have rooms without working smoke alarms.
- Gas pipeline pressure tests are not performed at most units.
- There are no records of inspection or testing of fire doors, dampers, or standpipe systems when installed.
- There are electrical violations in each unit, including unlabeled breaker panels, unused openings, breakers tied with copper wire, and extension cords used as permanent wiring.
Improvements
- TDCJ and the SFMO hold regular meetings to discuss inspection concerns and corrections.
- The SFMO conducts building plan reviews to ensure new TDCJ buildings are code compliant.

Operational Goals
- Facilities where fire protection systems are not maintained or not in service will be considered high-risk and will be inspected more frequently.
- TDCJ will use policies and procedures provided by the SFMO to correct violations and achieve compliance.
- TDCJ will perform more routine fire and life safety inspections to correct and rectify violations in a timely manner.
- TDCJ will report all fires in their facilities through appropriate state procedures.

Texas Juvenile Justice Department (TJJD)

Buildings inspected: 18  
Violations found: 31  
Violations corrected in FY 19: 20

Improvements
- TJJD requested that the SFMO assess four campuses to develop an equivalency plan for code and staffing requirements.
- TJJD quickly remedied violations at facilities that had multiple deficiencies.

Operational Goals
- TJJD and the SFMO will maintain open communication to ensure safety for residents and staff.
- The SFMO will inspect all TJJD facilities in FY20.

Texas Department of Transportation

Buildings inspected: 576  
Violations found: 110  
Violations corrected in FY 19: 269

Inspection Violations
- Garage-style doors are open and / or unsecure in several facilities, this violation can allow fire to spread throughout the facility.
• Portable fire extinguishers are not inspected for six and 12-year maintenance.
• Emergency lighting units are inoperable.
• The SFMO is unable to verify if some walls separating business occupancies and industrial occupancies are fire-rated.

**Improvements**

• Replaced double-sided, keyed deadbolts with card readers at several locations.
• Fewer extension cords are daisy-chained and used as permanent power supplies.

**Operational Goals**

Risk managers will get additional training.

---

**Texas Department of Public Safety (DPS)**

Buildings inspected: 29  
Violations found: 92  
Violations corrected in FY 19: 11

**Inspection Violations**

• Portable fire extinguishers are not appropriately maintained and inspected.
• Magnetic locking devices on doors do not properly release.
• Multiple locations use extension cords as permanent wiring due to a limited number of electrical outlets.

**Improvements**

• Appropriate signage has been added to many doors with double-sided, keyed deadbolt locks. In some cases, locks have been removed.
• DPS helps make corrections as inspections are conducted.

**Operational Goals**

DPS and the SFMO will establish safe occupant loads at driver’s license offices.

---

**Texas Parks and Wildlife**

Buildings inspected: 107  
Violations found: 76  
Violations corrected in FY 19: 96
Inspection Violations

- Portable fire extinguishers are not mounted correctly at some facilities.
- Some parks lack the proper number of portable fire extinguishers.
- Spliced wiring is present in some mechanical / electrical rooms.

Improvements

- Double-sided, keyed deadbolts have been replaced with thumb latches on interior locks.
- Fire extinguishers are maintained and inspected according to code.

Texas State Technical College System

Buildings Inspected: 33
Violations found: 94
Violations corrected in FY 19: 68

Inspection Violations

- One campus had corroded sprinkler piping.
- Rolling fire doors have not been inspected by a qualified door technician in some locations.
- Trash chutes do not have self-closing protective doors.

Improvements

If a campus is inspected, other campuses get the report to make sure they do not have the same violations.

Universities

Buildings inspected: 967
Violations found: 4,080
Violations corrected in FY 19: 686

Inspection Violations

- Installation of fire department access key boxes is an issue across the state.
- There are unsealed penetrations in IT closets and mechanical / electrical rooms.
- Several universities lack an annual inspection of their fire alarm and / or fire sprinkler system.
- Many locations have students’ appliances plugged into surge protectors and not into an electrical wall outlet.
- There is excessive combustible storage in many mechanical / electrical rooms.
- Fire doors do not close and latch properly.
- Many universities lack signs that identify fire department connections.
- Several universities do not conduct proactive inspections, relying solely on SFMO inspections to identify issues.

**Improvements**
- Universities continue to remove Jack and Jill type bathroom locks. These doors lock from the bedroom side of the suite to prevent suite mates from entering the bedroom, which can lock an occupant in a bathroom.
- There is less extension cord use throughout universities.
- Most universities have a good program in place to ensure emergency lights and exit signs are operable.

**Operational Goals**
Facilities where fire protection systems are not maintained or not in service will be considered high-risk and will be inspected more frequently.

**State Supported Living Centers**
Buildings inspected: 416
Violations found: 434
Violations corrected in FY 19: 92

**Inspection Violations**
- Some kitchens lack required fire suppression systems that use steam kettles.
- Vacant and seasonal buildings are used for combustible storage.
- There are unsealed penetrations in IT closets and mechanical / electrical rooms.
- Some fire-rated doors are held open by door stoppers.

**Improvements**
- Features of fire protection, such as fire alarm and sprinkler systems, are maintained and inspected as required by code.
- The staff corrected several simple violations during the inspection.

**State Hospitals**
Buildings inspected: 269
Violations found: 606
Violations corrected in FY 19: 155
Inspection Violations
- Several locations have secondary locking devices on closet doors in patient areas.
- Ceiling tiles are missing in various locations.
- Staff tried to prevent inspectors from entering some older buildings that no longer housed residents.
- Several locations have deteriorated storage buildings that lack appropriate fire protection equipment.
- Some emergency exit areas are obstructed.

Improvements
- The number of extension cords violations has decreased over the last year.
- The staff corrected several simple violations during the inspection.

Operational Goals
The SFMO will continue to inspect these facilities annually.

Texas Facilities Commission
Buildings inspected: 302
Violations found: 945
Violations corrected in FY 19: 283

Inspection Violations
- Increased use of extension cords and daisy-chained power strips for permanent wiring in many locations.
- Several locations lack current fire alarm inspections by a licensed fire alarm technician.
- Many buildings lack fire and smoke damper testing.

Improvements
- Appropriate signage has been added to many doors with double-sided, keyed deadbolt locks. In some cases, the locks have been removed.
- At the Texas School for the Deaf, two fire hydrants, a new fire alarm, and a new fire sprinkler system were installed.
- TFC added about 600 fire extinguishers to state parking garages.
- TFC received approval to add more than 300 door magnets for doors that were held open by props.
- TFC has a new contract to test all fire and smoke dampers.
Ammonium Nitrate (AN) Inspections

Buildings inspected: 36  
Violations found: 22  
Violations corrected in FY 19: 4

Inspection Violations
- Extension cords are used as permanent wiring in some facilities.
- The walls of wooden storage bins contain AN in some facilities.
- Some facilities lack portable fire extinguishers.

Improvements
- Local fire departments are aware of the facilities and can respond with appropriate staff, equipment and tactics to handle the event.
- Increased signage notifies emergency responders of facility risks.

Operational Outlook
- The SFMO will continue to work closely with AN facilities to ensure fire code compliance.
- The SFMO will continue to inspect AN facilities annually.
Fee-Based/Complaint Inspections

Buildings inspected: 1,652
Violations found: 4,000
Violations corrected in FY 19: 2,156

When requested, the SFMO conducts fee-based inspections of foster homes, nursing homes, day cares, and group homes. These inspections are required for facilities that need a state license.

The number of fee-based inspections conducted by the SFMO increases each year. In FY19, the SFMO performed 951 fee-based and complaint inspections, an increase of 14% from FY18 (836 inspections). By statute (Government Code 419), a person must be certified by the Texas Commission on Fire Protection to conduct fire safety inspections required by state or local law. Most local jurisdictions do not have a local fire marshal that employs a certified inspector or refuse to conduct these inspections. In these situations, the SFMO will inspect the properties.

The increase in fee-based and complaint inspections affects available resources to complete annual building inspections.

Common Inspection Violations:
- Fire alarm systems are not inspected as required by fire code.
- Portable fire extinguishers are not inspected as required by fire code.
- Numerous locations have obstructed exits.
- More locations have combustible storage in unapproved locations.
- Outside of SFMO inspections, many inspections performed in unincorporated areas fail to comply with adopted fire codes.

Improvements:
- Most noted violations are corrected within 30 days so that the facility can remain operational as a licensed facility.
- The SFMO works with the Department of Family Protective Services to bring the location into compliance. If the facility does not pass a fire inspection, it is unable to operate and will lose its license.

Operational Outlook:
- The SFMO will help the customer as requested.
- The SFMO will continue to work with locations that have significant violations so that they may remain open.