



## BOILER SAFETY AT A GLANCE

**Statute:** Chapter 755, Health and Safety Code

**Rules:** Title 16 T.A.C. Chapter 65

**Practice Act?** No

**Title Act?** Yes

**Inspections:** Yes

**Facilities:** Yes

**Equipment:** Yes

**Number of Certificates of Operation:** 52,486 (FY 24)

**Webpage:** [www.tdlr.texas.gov/boilers](http://www.tdlr.texas.gov/boilers)



### Overview:

A "boiler" is a heating boiler, a power boiler, an unfired steam boiler, a process steam generator or a nuclear boiler. State law requires that all boilers be registered with TDLR and have current certificates of operation. Depending on which American Society of Mechanical Engineers (ASME) Code of Construction they're fabricated to, they are to be inspected annually, biennially, or triennially by TDLR or an authorized inspector, who is employed by an Authorized Inspection Agency registered with the department.

There are more than 53,500 registered boilers in Texas. Boilers are used in commercial facilities, such as dry cleaners, car washes, and power plants. Additionally, boilers are found in schools, hospitals, and office buildings.

Much like an automobile, furnace, or air conditioner, boilers require an ongoing, routine maintenance and inspection program. Well-trained maintenance personnel, boiler operators and boiler inspectors are

essential to the safe operation of a boiler. Boiler inspectors examine the structural integrity of the boiler along with the associated safety devices attached to the boiler. These devices must remain in good operating condition for the continued safe operation of the boiler.

The loss of water (low water), furnace explosion, over-pressure and excessive temperature are the principal causes of boiler accidents and are primarily the direct result of missing or inoperative controls and safety devices, lack of maintenance, untrained operators, and complacency.

In 2020, Texas became the first state to require a safety system on all new boiler installations that automatically shuts down the boiler if the carbon monoxide level in the boiler room exceeds 50 parts per million (ppm). The Texas boiler rules were recently revised to allow remote monitoring of the carbon monoxide detector to permit the level of CO to increase to 200 ppm before shut-down so that personnel have time to arrive and correct the problem to avoid that unwanted result.



## How We Regulate

- The Compliance division oversees the boiler inspection process and provides program expertise.
- TDLR requires each boiler to be inspected internally (if applicable) and externally at the time of installation and at subsequent intervals.
- Uninsured boilers must be inspected by a TDLR boiler Inspector while insured boilers must be inspected by the insurance company providing the insurance, or its designee.
- In addition to the Chief Boiler Inspector, one Supervisor, and two Boiler Program Team Leads, TDLR has 14 Deputy Boiler Inspectors throughout the state whose primary responsibility is inspecting uninsured boilers. These inspectors are currently located in San Antonio, Corpus Christi, Houston, Dallas/Fort Worth, Amarillo, East Texas, Austin, and Midland/Odessa. The TDLR Boiler Program also has two Program Specialists whose primary responsibilities are to respond to phone calls and emails from the program's stakeholders.
- Six of the TDLR Boiler Program staff are additionally certified by both the ASME and the National Board of Boiler and Pressure Vessel Inspectors (NBBI) as Review Team Leaders (RTL). The team for these audits consists of a third-party inspector, their supervisor and the RTL. The RTL acts as the leader of a review team who audits a boiler or pressure vessels manufacturer or repair/alteration company on their ability to fabricate boilers and pressure vessel or those that make repairs and alterations.

These audits are completed on the behalf of ASME or NBBI. Upon completion of the audit, the inspector makes a recommendation to the applicable organization (ASME or NBBI) on whether to issue a Certificate of Authorization for the company to fabricate, repair, or alter boilers and pressure vessels.

- TDLR also performs boiler accident investigations.
- A violation of the boiler laws or rules may incur administrative penalties as well as be criminally prosecuted as a Class B misdemeanor, punishable by a maximum \$2,000 fine, a jail term not to exceed 180 days, or both.
- TDLR recently adopted a late inspection fee to assess to both the owner/operator and the Authorized Inspection Agency in an effort to reduce the number of boilers for which the inspection is not timely performed and becomes past due (after expiration of the boiler's certificate of operation). These fees are:
  - \$25 per day for the 1st 30 days,
  - \$50 per day for the 2nd 30 days,
  - \$100 per day for every day past 60 days.

## History

The Texas Boiler Act, Chapter 755 of the Health and Safety Code, was enacted on June 3, 1937, in response to the deadly New London natural gas explosion on March 18, 1937. The New London explosion killed 294 men, women and children when a natural gas leak beneath the New London School ignited, destroying the school. After the explosion, state law required that an odor be added to natural gas and required that boilers be approved and regularly inspected.

For many years the program was a part of the agency then known as the Bureau of Labor Statistics. Later, the agency name was changed to the Texas Department of Labor and Standards. In 1989, the name was changed to the Texas Department of Licensing and Regulation.

## Board of Boiler Rules

The TDLR Chief Boiler Inspector serves as the Presiding Officer. The board has 11 members serving staggered six-year terms, including:

- three members representing persons who own or use boilers in this state;
- three members representing companies that insure boilers in this state;
- one member representing boiler manufacturers or installers;
- one member representing organizations that repair or alter boilers in this state;
- one member representing a labor union; and
- two public members.