



New Aboveground Storage Vessel Safety (ASVS) Program Overview: 30 TAC Chapter 338

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Background

- Past chemical fires indicated a need to regulate the type of tanks that were involved
- The 87th Texas Legislature passed Senate Bill (SB) 900 to set design safety standards using industry guidance
- SB900 is intended to ***“promote the safety of storage vessels...by adopting requirements for the design, construction, operation, and maintenance of storage vessels, with the objective of protecting groundwater and surface water resources in the event of accidents and natural disasters”***
- There are an estimated 36,000 currently regulated aboveground storage vessels (ASVs) that may be impacted by this new law



Definitions

Aboveground Storage Vessel (ASV)

- is made of non-earthen materials
- has a capacity of 21,000 gallons or more of a **regulated substance** as defined by Section 26.343, Water Code
- is located at or is part of a petrochemical plant, a petroleum refinery, or a bulk storage terminal

Bulk Storage Terminal means a site in Texas, including end-of-line pipeline storage terminals (excluding breakout tanks), refinery storage terminals, for-hire storage terminals, and rail and barge storage terminals.



Regulated Substance

Texas Water Code: Chapter 26, Water Quality Control: Section 26.343 Regulated Substances

Regulated substances under this subchapter include:

- A substance defined in Section 101(14) of the CERCLA, but does not include a substance regulated as a hazardous waste under the federal Solid Waste Disposal Act
- Petroleum, including crude oil or a fraction of it, that is liquid at standard conditions of temperature and pressure
- Any other substance designated by the Agency



Exemptions

The following tanks are not considered storage vessels:

- Tanks used in or associated with the production or gathering of crude oil or natural gas
- Tanks that are part of a stormwater or wastewater collection system
- Flow-through process tanks, including pressure or process vessels and oil/water separators
- Intermediate bulk containers that may be moved within a facility
- Tanks regulated under the federal Surface Mining Control and Reclamation Act



Exemptions Continued

The following tanks are not considered storage vessels:

- Tanks used for the storage of products regulated under the Federal Food, Drug, and Cosmetic Act
- Tanks used in the management of leachate, methane gas, or methane gas condensate, unless the tank is used for storage of a regulated substance
- Tanks used to store liquefied petroleum gas
- Tanks regulated under DOT's Pipeline and Hazardous Materials Safety Administration



Exemptions Continued

The following tanks are not considered storage vessels:

- **Heated tanks** - These are vessels that are heated using external heat including but not limited to steam, electric heating element, or a heat medium such as hot oil. Heated vessels do not include those that include process fluid that are received above ambient temperature
- **Tanks operating above 0.5 PSIG** - This is measured with a pressure gauge in the vapor space of the tank or calculated as the total mixture vapor pressure at the storage temperature converted to gauge pressure.

Safety Standards



“Include all and only those critical safety elements that are applicable to a storage vessel...ensuring the correct critical safety elements are applied to the correct types of storage vessels”

- Specific safety standards apply only to the type of storage vessels as specified by the regulation or standard.



Safety Standards: Applicability

- Applicability of the requirements is based on the applicability section for each of the referenced standards.
- It is not the intent of the TCEQ to expand the applicability of the national consensus standards or federal statutes/regulations beyond the applicability provided in those specific standards.
- For any national consensus standard or federal statute/regulation incorporated by reference in this rule, owners or operators must comply with any separate applicable standards and regulations included in the incorporations by reference

Safety Standards from Federal Regulations



CAPP

Chemical Accident Prevention Provisions

- 40 Code of Federal Regulations (CFR) Part 68
- Subpart E: Emergency Response
- Subpart G: Risk Management Plan
- Subpart H: Other Requirements

Safety Standards from Federal Regulations



OPP

Oil Pollution Prevention

- 40 CFR Part 112
- Incorporates Spill Prevention, Control, and Countermeasure Plan requirements
- Incorporates Facility Response Plan requirements

Safety Standards from National Consensus



API

American Petroleum Institute Standard 653: Tank Inspection, Repairs, Alteration, and Reconstruction

- § 4.3: Tank Shell Evaluation
- § 4.4: Tank Bottom Evaluation
- § 4.5: Tank Foundation Evaluation
- § 6.2: Inspection Frequency Considerations
- § 6.3: Inspections from the Outside of the Tank
- § 6.4: Internal Inspection
- § 8: Design Considerations for Reconstructed Tanks
- § 9: Tank Repair and Alteration

Safety Standards from National Consensus



API

American Petroleum Institute Standard 2350: Overfill Prevention for Storage Tanks in Petroleum Facilities

- § 4: Overfill Prevention System
- § 5: Overfill Prevention Systems

Safety Standards from National Consensus



FIRE

National Fire Protection Association (NFPA) 30

- § 22.8: Fire Protection for Aboveground Storage Tanks

OR

API Recommended Practice 2001

- § 5-11

Safety Standards from National Consensus



New

Additional Requirements for New ASVs

- Only required for ASVs constructed after September 1, 2027
- **API Standard 650:** Welded Tanks for Oil Storage
- **NFPA Standard 30 § 22.4:** Location of Aboveground Storage Tanks



Requirements for ASVs

- **Registration** of each ASV
- **Certification** of compliance with the safety standards
- Pay the annual registration **fee**
- TCEQ will conduct on-site **inspections** of the registered ASVs at least once every five years to determine compliance



Requirements for ASVs: Registration

- Existing ASVs (constructed before 9/1/2027) will be required to **register** with the TCEQ by 9/1/2027
- New ASVs will be required to register with the TCEQ within 30 days after the start of operation

Requirements for ASVs: Registration (cont)



Concepts:

- No physical paper forms will be used for this program.
- Each facility will have a registration associated to a Regulated Entity Number (RN).
- The registration for the facility will have a unique identifying number for each vessel.
- The customers will provide all registration and compliance information electronically through the State of Texas Environmental Electronic Reporting System (STEERS).



Requirements for ASVs: Certification

- Existing ASVs (constructed before 9/1/2027) will be required to **provide certification status** with the standards at the time of registration.
 - The facility will self-certify each ASV as either “compliant” or “non-compliant”
 - If an ASV is “non-compliant,” the owner will need to provide the date of the next regularly scheduled out-of-service maintenance
- Existing ASVs **must achieve compliance** with the ASVS Program during the next regularly scheduled out-of-service maintenance or before September 1, 2037, whichever comes first

Requirements for ASVs: Certification (continued)



- New ASVs (constructed after 9/1/2027) must certify compliance within 30 days of operation start date
- **All ASVs** will be required to re-certify compliance with the safety standards every 10 years



Requirements for ASVs: Annual Fees

- Rule language includes a maximum total fee of \$2,000 per ASV
- The estimated number of ASVs and the size distribution the agency used for the fee calculations has an unknown degree of uncertainty
- The proposed fee structure will allow TCEQ to adjust the fees up or down as needed to cover the cost of administering the program
- **Proposed fees:**
 - **\$200 flat fee (per vessel, regardless of size) AND**
 - **\$0.0024/per barrel of capacity for vessels over 20,000 barrels**



Requirements for ASVs: Annual Fees

Capacity in barrels (bbls)	500	20,000	20,001	100,000	200,000	750,000	800,000
Per ASV Flat Fee	\$200	\$200	\$200	\$200	\$200	\$200	\$200
Per barrel fee (\$0.0024/bbl)	-	-	\$48	\$240	\$480	\$1,800	\$1,920
Total per ASV Fee	\$200	\$200	\$248	\$440	\$680	\$2,000	\$2,000



Requirements for ASVs: Recordkeeping

- Records must be immediately accessible for the owner/operator and during inspections
- Records may be electronic, located on-site, or off-site
- Must maintain copies of all records relating to registration & certification
- Must maintain copies of supporting documents to demonstrate compliance with the safety standards
- Records must be kept for the operational life of the ASV



Requirements for ASVs: Inspections

- TCEQ will conduct on-site inspections of the registered ASVs at least once every 5 years to determine compliance
- Owner or operator must allow TCEQ to enter facility at reasonable times and provide requested information
- TCEQ may inspect; obtain samples collected by the owner/operator; and conduct monitoring or request owner/operator to conduct monitoring
- TCEQ may direct an owner/operator to conduct monitoring/testing if there is reasonable cause to believe that a release occurred

Guidance & Training



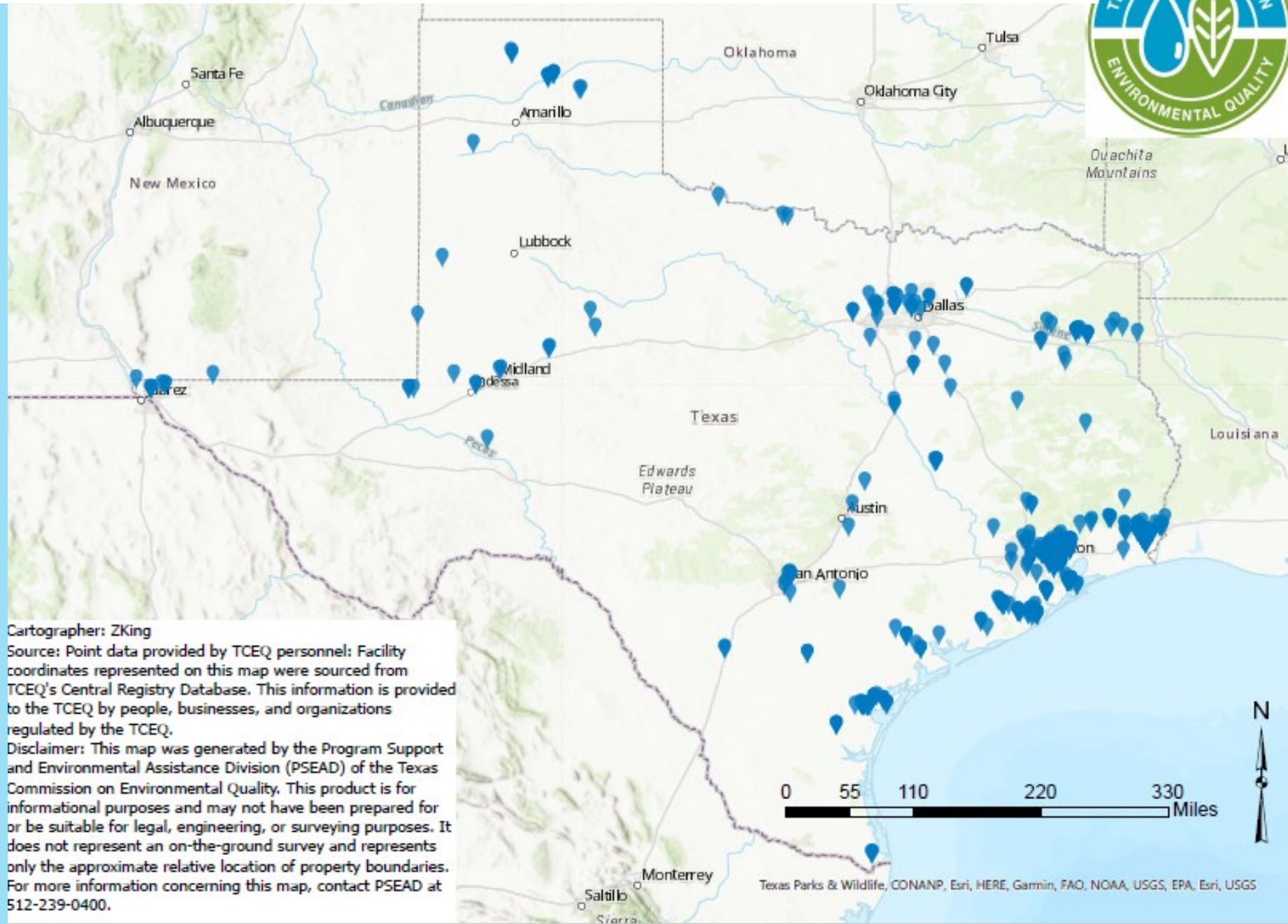
- TCEQ will be developing a guidance document for this new program.
- The guidance document will help regulated entities determine which specific safety standards apply to their ASVs.
- TCEQ will also offer training on how to register when the registration portal is complete.



Weblinks

- 30 TAC Chapter 338
[https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=338](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=338)
- Texas Water Code Section 26.3442
<https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm#26:~:text=Sec.%2026.3442.%20%20PERFORMANCE%20STANDARDS%20FOR%20SAFETY%20AT%20STORAGE%20VESSELS>

Locations of Petrochemical Facilities in Texas



Cartographer: ZKing

Source: Point data provided by TCEQ personnel: Facility coordinates represented on this map were sourced from TCEQ's Central Registry Database. This information is provided to the TCEQ by people, businesses, and organizations regulated by the TCEQ.

Disclaimer: This map was generated by the Program Support and Environmental Assistance Division (PSEAD) of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact PSEAD at 512-239-0400.

Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Esri, USGS



Program Implementation Timeline

2023
September

2025
September

2027
September

2037
September

Program Begins

Registration Begins

Registration Deadline & Certification Begins

Certification Deadline

All ASVs must register by this date and provide status of compliance!

New ASVs must register by this date and provide status of compliance with the standards no later than 30 days after start of operation.

Existing ASVs must ensure compliance with the standards by this date.

All ASVs must certify compliance with the standards by this date!

Storage Vessel Safety Program becomes effective process

Registration process

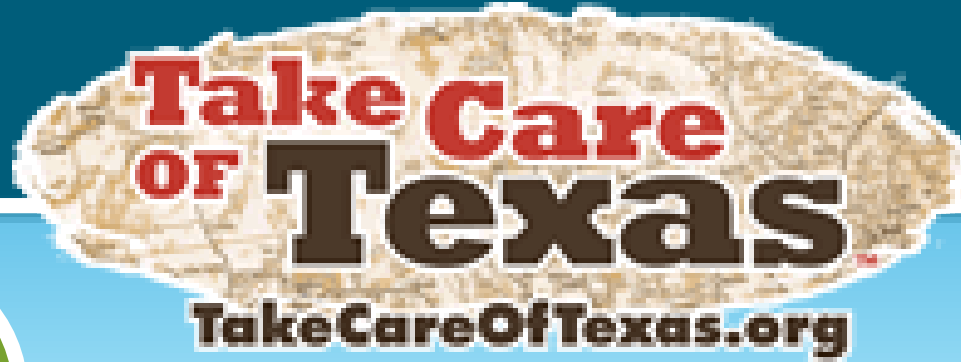
out-of-service maintenance event after this date.



Where can you find information?

- Agency website titled: New Program Regulating the Safety of Aboveground Storage Vessels:
<https://www.tceq.texas.gov/permitting/asvs>
- We have also set up a GovDelivery email box that you can sign up to receive updates, located at:
https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new?qsp=TXTC EQ_202017

Questions?



RM

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